Institutional Television

Instructions for use
32ST220P

SmartCard TELEVISION

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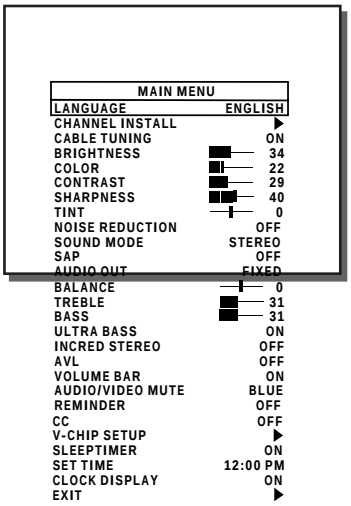
PHILIPS

INTRODUCTION

Your Philips Institutional Television tuning system is set to operate in either "Consumer" or "Commercial" type product modes. In the Consumer mode the tuning system operates as a standard TV, allowing normal initial power ON, channel selection, and volume control (as well as a variety of select Menu features). Use the supplied remote control to adjust the TV in the Consumer mode. Refer to the "On-Screen Features (Consumer)" section in this manual for descriptions on the use and operation of Consumer mode Menu controls. Use a T374AH (RG4172-BK03) remote with its TV Setup, Guest, and Data Communication Mode capabilities to set the TV for the various Commercial mode settings. (Note: On some select Institutional TV models you may also be able to use the buttons at the set to select a Setup Mode. Again, this may not apply or be available on your current model. Commercial setup and verification procedures may be performed which are backward compatible with previous Commercial chassis setup remotes. (See T374AH Remote Control Instructions, part # IB7166E002, for specific operating details.)

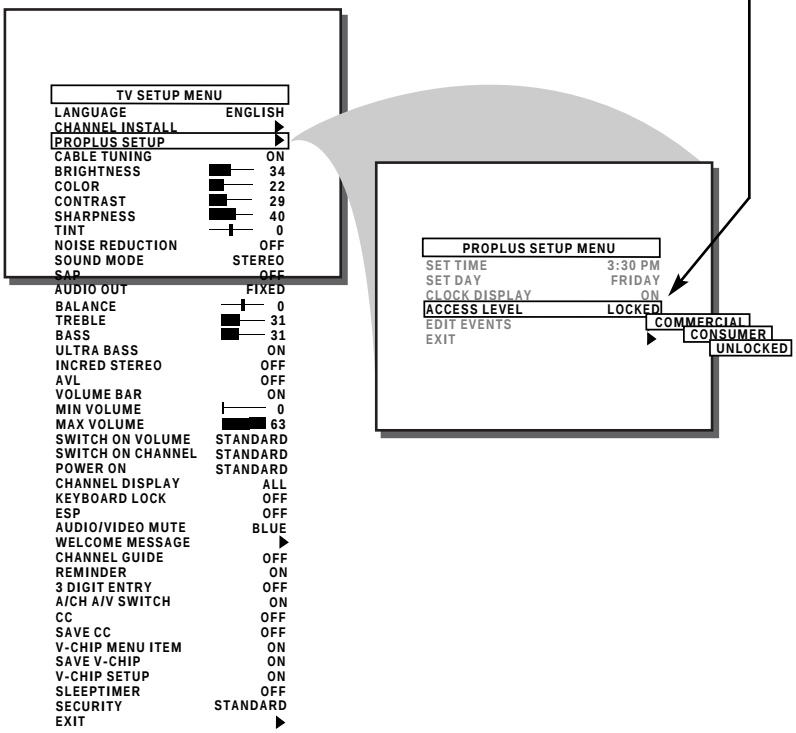
CONSUMER ONSCREEN MENU

(For basic television Menu and supplied remote operation instructions, refer to the Onscreen Features (Consumer) section of this owner's manual.)



COMMERCIAL SETUP MENU

(For Menu control operations and use, refer to the OnScreen Features (Commercial) section of this owner's manual.)



Within the TV SETUP MENU (as selected with the T374AH remote control) use the "PROPLUS SETUP MENU - ACCESS LEVEL" control to place the television in either the CONSUMER, COMMERCIAL, LOCKED, or UNLOCKED mode.

When CONSUMER is the selected mode, the TV functions as a standard consumer television (Philips RC-5 system) and accepts standard remote control commands. Events are ignored and the television is used for normal TV viewing (in place of any commercial /professional special event applications).

When UNLOCKED is the selected mode, the TV functions the same as in the Consumer Mode. When an event is active, no menu is available unless the Setup Code or Setup Remote is used. (Channel selection either is not allowed or is restricted to the event channel ring - depending upon the event programming.)

When COMMERCIAL is the selected mode, the Consumer menu is limited to three Menu items - CLOSED CAPTION (CC); SLEEPTIMER; and V-CHIP SETUP. Channel selection and tuning are also restricted to channels in the standard channel ring. When an event is active, no menu is available unless the Setup Code or Setup Remote is used. (Channel selection either is not allowed or is restricted to the event channel ring - depending upon the event programming.)

When LOCKED is the selected mode, the TV may be used only during an event. If no event is active, the TV cannot be turned ON (unless the Setup Code is used to enter the Setup Menu or the Setup Remote is used). When an event is active, no menu is available unless the Setup Code or Setup Remote is used. (Channel selection either is not allowed or is restricted to the event channel ring - depending upon the event programming.)

Note: Use of various Audio/Video connection jacks, or other input modes on the rear of the set, is dependent on whether the TV has a ProVideo Kit1 Expansion, or other Smart Card Assembly, jackpanel installed. Please refer to the separate setup and use information that will detail the various Audio and Video connections possible with these type modules. Also, please be aware that dependent upon the type of Smart Card module installed with the set that certain select "event" program features may be affected or not be operable.

SAFETY INSTRUCTIONS - Read before operating equipment

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. **Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** - All operating and use instructions should be followed.
5. **Water and Moisture** - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool, etc.
6. **Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.

6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

6B. **Tilt/Stability** - All televisions must comply with recommended international global safety standards for tilt and stability properties of its cabinet design.
- Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet which could ultimately overturn the product.
- Also, do not endanger yourself, or children, by placing electronic equipment/toys on the top of the cabinet. Such items could unsuspectingly fall from the top of the set and cause product damage and/or personal injury.

7. **Wall or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. **Ventilation** - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. **Heat** - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. **Power Sources** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. **Power-Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
12. **Cleaning** - The appliance should be cleaned only as recommended by the manufacturer.
13. **Power Lines** - An outdoor antenna should be located away from power lines.
14. **Outdoor Antenna Grounding** - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.

    Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mats and supporting structure grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Fig. below.
15. **Non-use Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
16. **Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
17. **Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:
    - **A.** The power supply cord or the plug has been damaged; or
    - **B.** Objects have fallen, or liquid has been spilled into the appliance; or
    - **C.** The appliance has been exposed to rain; or
    - **D.** The appliance does not appear to operate normally or exhibits a marked change in performance; or
    - **E.** The appliance has been dropped, or the enclosure damaged.
18. **Servicing** - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Example of Antenna Grounding as per NEC - National Electric Code

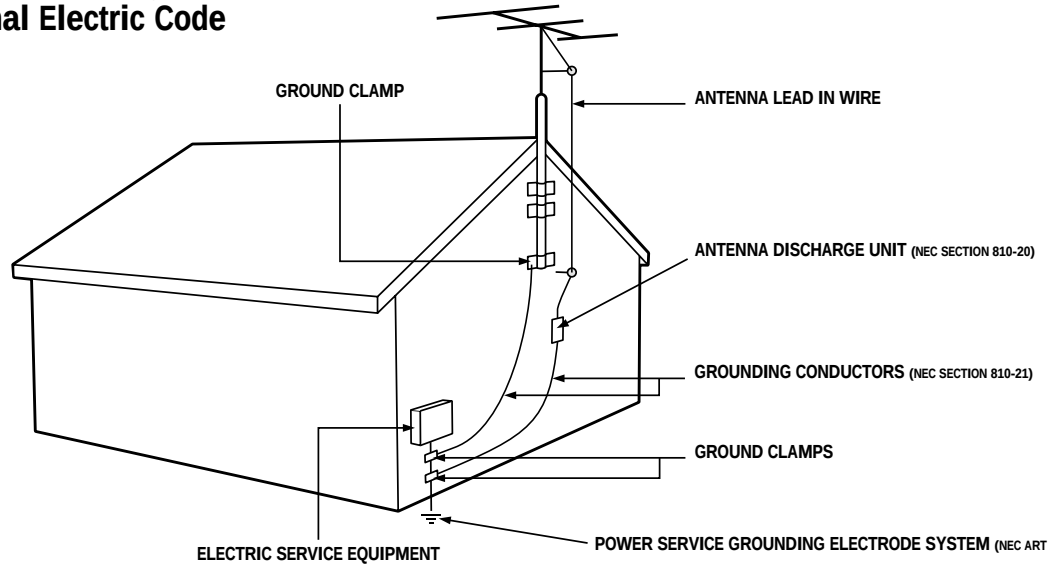

GROUND CLAMP
ANTENNA LEAD IN WIRE
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
ELECTRIC SERVICE EQUIPMENT
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

TABLE OF CONTENTS

Introduction

Consumer and Commercial Menus 2
Safety/Precautions 3
Table of Contents 4
Features 5
Hooking Up Your TV 6
Basic TV and Remote Control Operation 7
Using the TV Remote Control 8

Onscreen Features (Consumer)

How to Use the On-Screen Menu 9
How to Set the TV for Cable TV Operation 10
Channel Installation Control Features:
- Adding Channels in Memory (Auto Program) .11
- Adding Channels in Memory (Manually) 12
- Using the Input Mode Control 13
- Using the Channel Label Control 13
How to Adjust the TV Color 14
Using the Stereo (& SAP) Control 14
Using the Bass, Treble, Balance Controls 15
How to Set the Incredible Stereo Control 15
Using the Automatic Volume Limiter Control 16
How to Set the Volume Bar Control 16
How to Set the Audio/Video Mute Control 17
How to Set the Channel Reminder 17
How to Select the Closed Caption Feature 18
Using the V-Chip or Content Advisory Control...19
- V-Chip TV Ratings Guidelines 20
- V-Chip Movie Ratings Guidelines 21
Setting the Sleep Timer 22
Using the Set Time Control 22
Using the Clock Display Control 22
How to Set the On-Screen Language Control 23
Using the External Speaker Terminals 23
Using the Audio Output Jacks 24
Using the Front Audio/Video Input Jacks 24

Remote Control Operation with Accessory Devices (VCRs, Cable TV Converters, DVDs, etc.)

Setting the Remote to Work Other Devices 25
- Direct Number Entry Method 26
- Search Method 27
- Direct Entry Remote Control Code Numbers..28-29
Using the Remote's VCR Buttons 30

Onscreen Features (Commercial)

Description of Onscreen Controls 31-33

General Information

Tips if Something Isn't Working 34
Glossary of Television Terms 35
Index 35
Limited Warranty 36

NOTE: This owner's manual is used with several different television models. Not all features (and drawings) discussed in this manual will necessarily match those found with your television set. This is normal and does not require you contacting your dealer or requesting service.

Because of continuous product improvements, the information mentioned in the documents accompanying your product are subject to change without notice.

Know these

safety*symbols*

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This "bolt of lightning" indicates uninsulated material within your unit which may cause an electrical shock. For the safety of everyone in your household, please do not remove the product covering.

The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, and fully insert.

ATTENTION: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

FEATURES

Philips exclusive "Pro Video" control tuning software which allows operation of the TV in either "Consumer" or "Commercial" modes (depending upon its applied purpose and use).

Audio/Video jack panel for direct connections with VCRs (or other video accessories) for quality TV picture and sound playback. **Note: Use of various Audio/Video connection jacks,** or input modes (i.e., S-VIDEO, etc.), is dependent on whether the TV has a ProVideo Kit1 Expansion, or other Smart Card Assembly, jackpanel installed. Please refer to the separate setup and use information that will detail the various Audio and Video connections possible with these type modules. Also, please be aware that dependent upon the type of Smart Card module installed with the set that certain select “event” program features may be affected or not be operable.

Infrared Remote Control which operates your TV set and a variety of Infrared (IR) wireless remote control VCRs, Cable TV Converters, DVDs, and other accessory equipment.

Standard broadcast (VHF/UHF) or Cable TV (CATV) channel capability.

Stereo Ready TV with built-in audio amplifier and twin speaker system for receiving TV programs broadcast in stereo sound.

Closed Captioning which allows the viewer to read TV program dialogue or voice conversations as on-screen text.

Automatic Programming of channels for quick and easy selection of favorite stations available in your area.

On-Screen Features (in either English, French, or Spanish) which show helpful messages for setting of TV controls.

Parental Control for “Censoring” or blocking out channels to keep children from watching undesirable programming. Parental guideline and Movie Rating settings can also be used as part of the new Content Advisory Data system available with TV programming.

Automatic Volume Limiter for the control of TV volume levels during program changes or commercial breaks.

Sleep Timer which automatically turns off the TV at preset times.

As you unpack your TV please note that the following items have been included with your set:

- Owner's Manual
  - Safety Tip Information
- Warranty Registration Card
- Remote Control Transmitter
- Batteries for Remote Control Use

Please take a few minutes to complete your registration card. The serial number for the TV is on the back of the set.

Refer to the back of this manual for instructions on the cleaning and care of the TV.

End-of-Life disposal

Your new institutional television and its packaging contain materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and minimize the amounts which need to be properly disposed.

Your product also uses batteries which should not be thrown away when depleted, but should be handed in and disposed of as small chemical waste.

Please find out about the local regulations on how to dispose of your old television, batteries, and packaging materials whenever you replace existing equipment.

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HOOKING UP YOUR TV

ANTENNA

OUTDOOR/INDOOR

A combination (outdoor or indoor) antenna receives normal broadcast channels 2-13 (VHF) and 14-69 (UHF). Your connection to such an antenna is easy since there is only one antenna plug (75Ω ANT/CABLE) on the back of your TV - and that's where the antenna goes.

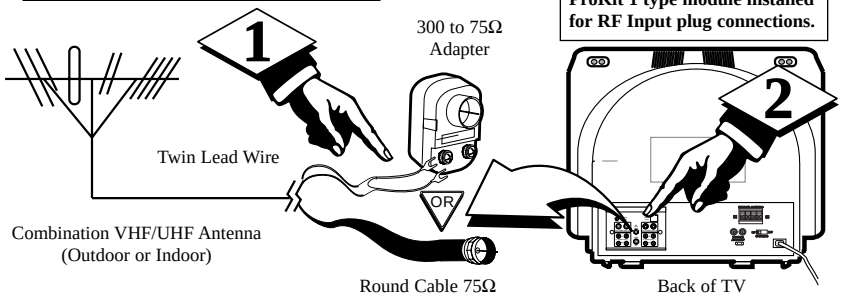
BEGIN

1 **If your antenna has a round cable** (75 ohm) on the end, then you're ready to connect it to the TV.
If your antenna has flat twin-lead wire (300 ohm), you first need to attach the antenna wires to the screws on a 300 to 75 ohm adapter.

2 **Push the round end** of the adapter (or antenna) onto the 75Ω ANT/CABLE plug on the rear of the TV. If the round end of the antenna wire is threaded, screw it down tight.

STOP

Note: Rear view of the model TV is shown with an optional ProKit 1 type module installed for RF Input plug connections.



SMART HELP

Remember, set the TV for the type signal you've connected (see page 9).

Note: For homes with separate UHF and VHF antennas, you will need an optional combiner to connect to the TV. To order any optional accessory, contact your dealer or call the toll-free accessory ordering number **(1-800-851-8885).**

CABLE TV

CABLE INPUT/CONVERTER

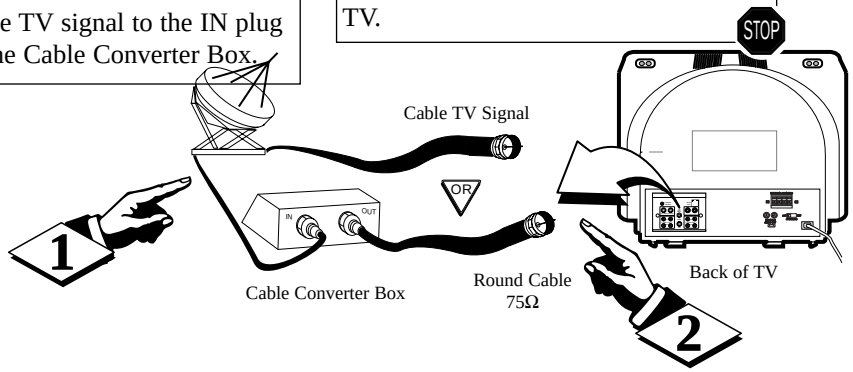
Your Cable TV signal may be a single (75 ohm) cable or a Cable Converter Box installation. In either case, the connection to the TV is easy.

BEGIN

1 **If your Cable TV signal is a single round cable** (75 ohm), you're ready to connect to the TV. Go to step 2.
If you have a Cable Converter Box: Connect the Cable TV signal to the IN plug on the Cable Converter Box.

2 **Connect the Cable TV** signal to the 75Ω ANT/CABLE plug on the TV.
If you have a Cable Converter Box: Use a round cable (75Ω) to connect the OUT plug on the Cable Converter Box to the 75Ω ANT/CABLE plug on the TV.

STOP



VCR TO TV

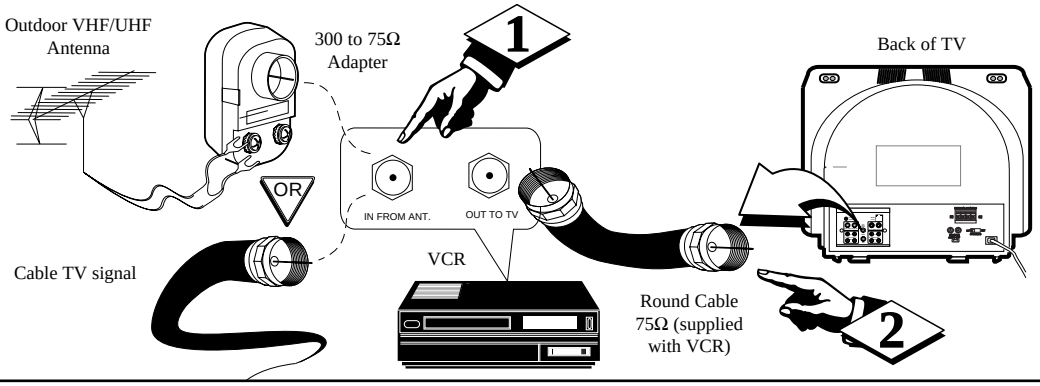
BASIC CONNECTION

The basic Antenna, or Cable, to VCR to TV connection is shown to the right. For more information on hookups with Cable Converter Boxes, refer to your VCR and Cable Converter Box Owner's Manuals.

BEGIN

1 **Connect your Antenna or Cable TV signal to the IN FROM ANT(enna)** plug on the VCR.

2 **Connect the OUT TO TV plug on the VCR to the 75Ω ANT/CABLE** plug on the TV (connecting cable supplied with the VCR).



BASIC TV AND REMOTE CONTROL OPERATION

BEGIN

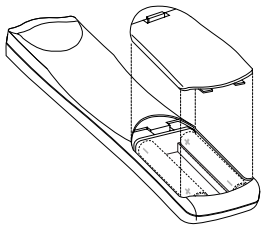
1. **Press the POWER button** to turn on the TV.
2. **Press the VOL(ume) ▲/▼** buttons to adjust the sound level.
3. **Press the CH(annel) ▲/ ▼** buttons to select TV channels.
4. **Point the remote control toward the remote sensor on the TV** when operating the TV with the remote.

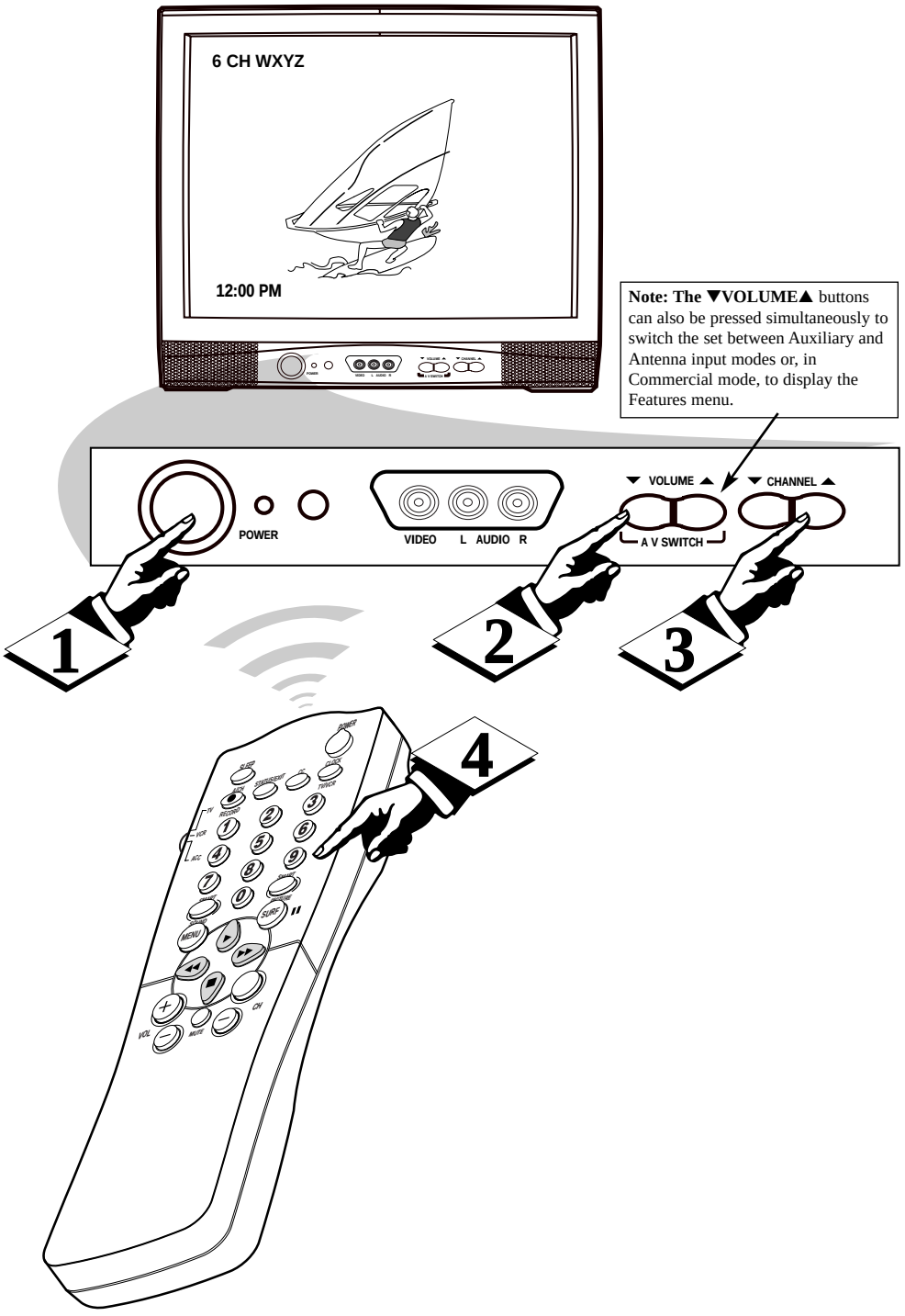
Note: Always press **two number buttons** on the remote when selecting channels. For example: press "0," then "6," for channel 6.

STOP

To load the supplied batteries into the remote:

1. **Remove the battery compartment lid** on the back of the remote.
2. **Place the batteries (two AA) in the remote**. Be sure the (+) and (-) ends of the batteries line up as marked inside the case.
3. **Reattach the battery compartment lid**.





SMART HELP

Remember, the tuned channel number will appear when you change the channel. You also may press the STATUS button on the remote control to see the current channel number.

SMART HELP

Remember, always point the remote control toward the remote sensor on the TV when operating the TV with the remote.

Sleep Button
Press to set the TV to automatically turn itself OFF. Also can be used as an Enter button when sending channel commands to remote controlled cable converters or VCRs.

Status/Exit Button
Press to see the current channel number on the TV screen. Also press to clear the TV screen after control adjustments.

A/CH-Record Button
Press to toggle between the currently viewed channel and the previously viewed channel. When in the VCR mode, press to start the recording of a video tape.

TV/VCR/ACC Mode Switch
Slide to TV position to control TV functions; VCR to control VCR functions; and ACC for Cable Converter, DBS, DVD, etc. functions.

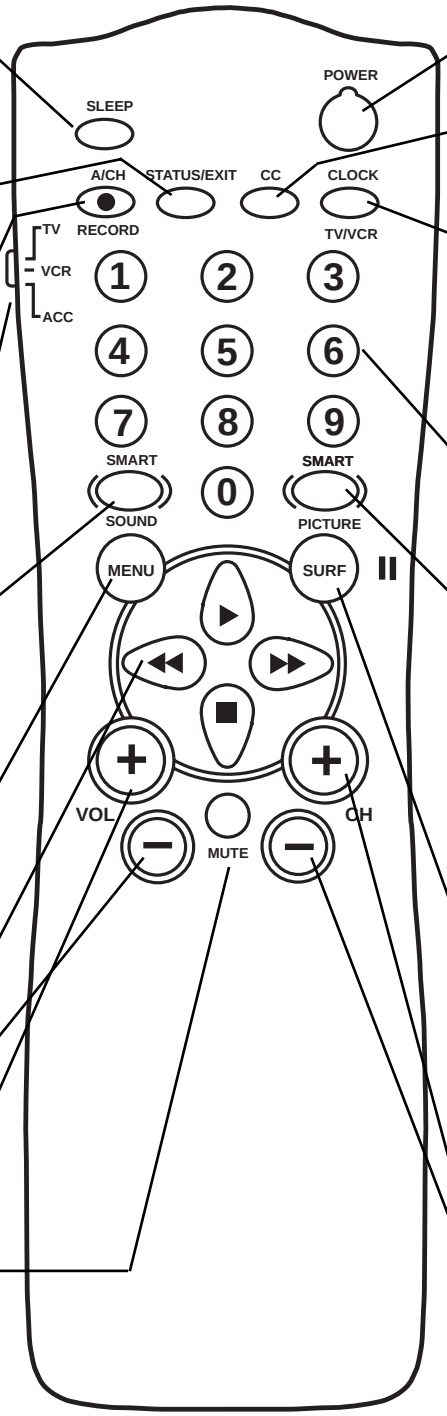
SmartSound™ Button
Available on select models only, may not operate or apply to your set.
Press to select from a list of SmartSound controls (which are factory preset sound control levels set for different types of listening modes and types of programming.)

Menu Button
Press for the onscreen menu to appear. Press the Menu button repeatedly to move forward through the current onscreen feature control selections.

Cursor Buttons
Use these buttons to select and adjust the TV's onscreen menu. Also used with a VCR for PLAY, FAST FORWARD, REWIND, and STOP functions.

Volume (+), (–) Buttons
Press to adjust the TV sound level up and down.

Mute Button
Press to turn the sound OFF on the TV. "MUTE" appears onscreen to confirm that no sound will be heard through through the TV speakers. Press the Mute button again to return TV sound to its previous listening level.



Power Button
Press to turn the TV (or select VCR, Cable Converter, etc.) ON and OFF.

CC Button
Press to select Closed Caption options within the menu. (Refer to the Owner's Manual for details.)

Clock-TV/VCR Button
Available on select models only, may not operate or apply to your set.
Press to select TV Clock menu options
With remote switch in the VCR position press to view the playback of a tape (VCR indicator will light on front of VCR). Press again to place the VCR in the TV mode to view one program while recording another program (VCR indicator will go off on the VCR).

Number Buttons
Press the number buttons to select TV channels. When selecting single digit channels, press the number of the desired channel. The TV will pause for a few seconds then tune to the selected channel. (Note: you can also press "0" first, then the desired number.) For channels "100" and above, you must program the desired channels into the TV's channel memory.

SmartPicture™ Button
Available on select models only, may not operate or apply to your set.
Press to select from a list of SmartPicture controls (which are factory preset picture levels set for different types of viewing sources and programs.)

Surf Button
Available on select models only, may not operate or apply to your set.
Press to quickly select from a series of previously viewed channels. When the remote control is in the VCR mode, press the Surf button to pause the playback of a video tape.

Channel (+), (–) Buttons
Press to change the tuned channel. Only channels "saved" into the TV's program channel memory ring will be available for selection.

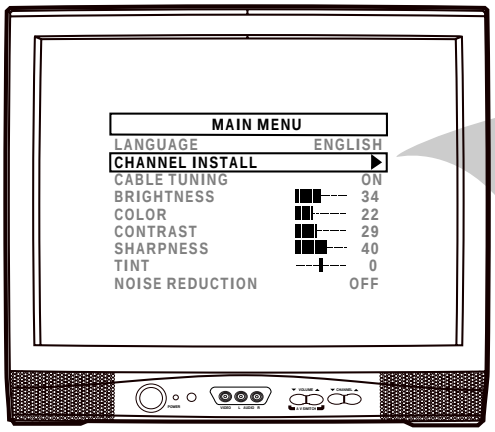
How to Use the On-Screen Menu

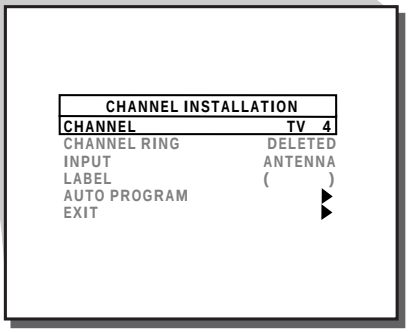
Features for your TV can be adjusted from a Menu screen shown on the TV. Each Menu item can be adjusted by viewing the screen and pressing a button.

BEGIN

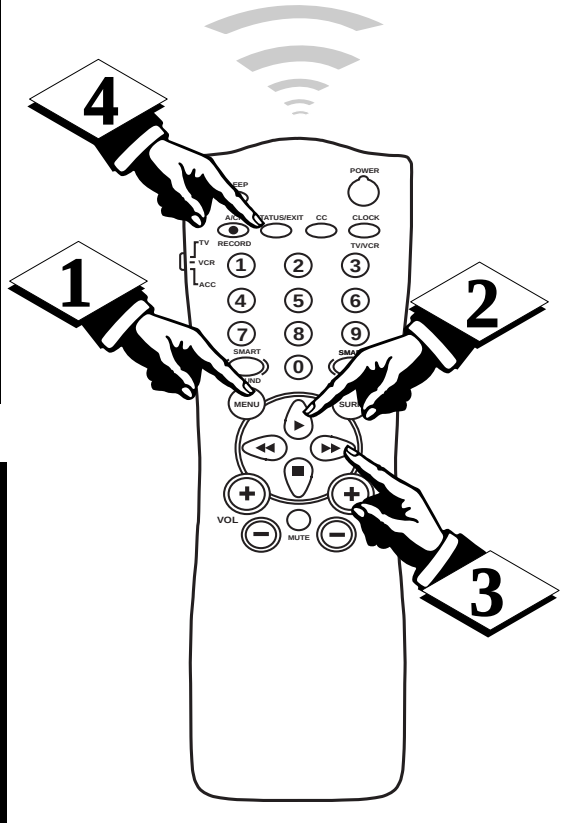
1. **Press the Menu button on the remote**. The on-screen menu appears.
2. **Press Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons on the remote,** to select a feature control. A highlight bar will show the selected feature.
3. **Press the Cursor Right (▶) and Left (◀)buttons on the remote** to adjust the selected onscreen feature control.
4. **Press the STATUS/EXIT button** on the remote to remove the on-screen menu.
(You can also use the EXIT control within the onscreen Menu to remove the Menu from the TV screen, or wait for the Menu screen to time out.)

STOP





- Consumer Onscreen Menu Mode - (In other Commercial mode settings (i.e., Unlocked, etc.) not all select control items will appear as shown above.)



Smart Help

If the on-screen menu disappears and you are not finished, press the MENU button. The on-screen menu will return.

Note: Selection and use for both the Consumer and Commercial mode onscreen Menu feature controls will work in basically the same manner.

How to Set the TV for Cable TV Operation

Make sure the TV is set to pick up either Cable TV stations or Antenna signals. In other words, the TV needs to know whether you've connected a Cable TV signal or a normal antenna to its 75Ω ANT/CABLE plug.

BEGIN

1 **With the Menu onscreen press the Menu button repeatedly , or use the Cursor (▲) Up and Down (▼) buttons,** to select CABLE TUNING with the TV's highlight control bar.

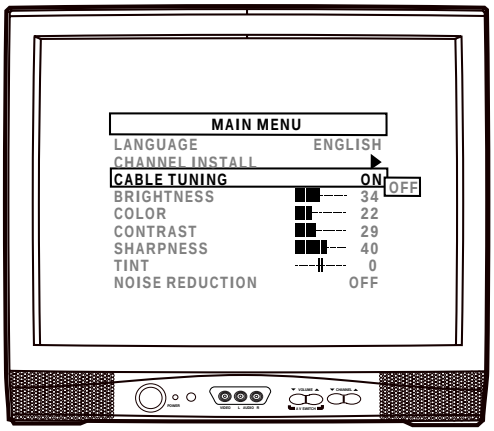
2 **Press the Cursor Right (▶) or Left (◀)button on the remote** to select:

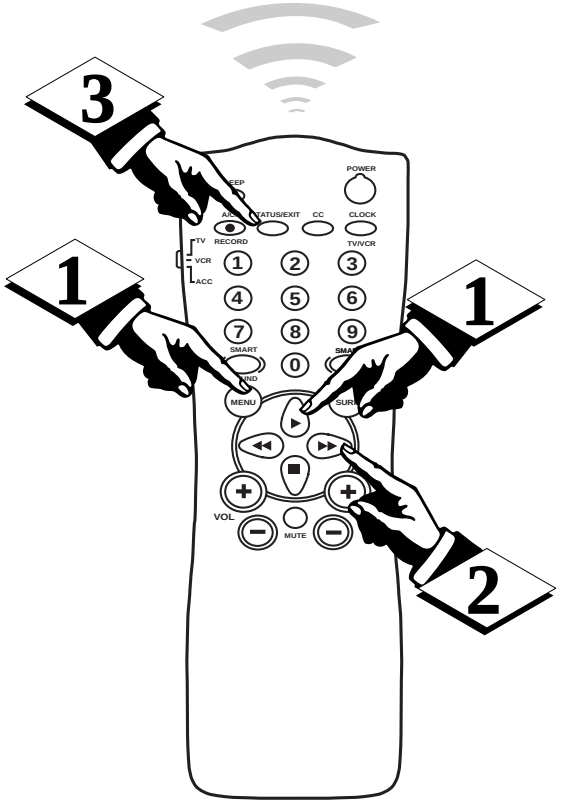
ON - If you DO have Cable TV connected to the TV. Channels 1-125 may be selected. Or, select

OFF - If you have an Antenna connected to the TV. Channels 2-69 may be selected.

3 **Press STATUS/EXIT** to remove the on-screen menu.

STOP





Smart Help

Try it out. **Press the CH(annel) +, -** buttons to scan the channels. Remember, the TV has been set at the factory to select certain channel numbers. See the next page to set the TV to select the channels in your area.

CHANNEL INSTALLATION: ADDING CHANNELS (AUTOPROGRAM)

Your TV can automatically set itself for local area (or Cable TV) channels. This makes it easy for you to select only the TV stations in your area when you use the CH(annel) +, - buttons.

BEGIN

1 **With the Main Menu onscreen press the Menu button repeatedly , or use the Cursor (▲) Up and Down (▼) buttons,** to select CHANNEL INSTALL with the TV's highlight control bar.

2 **Press the Cursor Right (▶) or Left (◀)button on the remote** to select the Channel Installation control Menu.

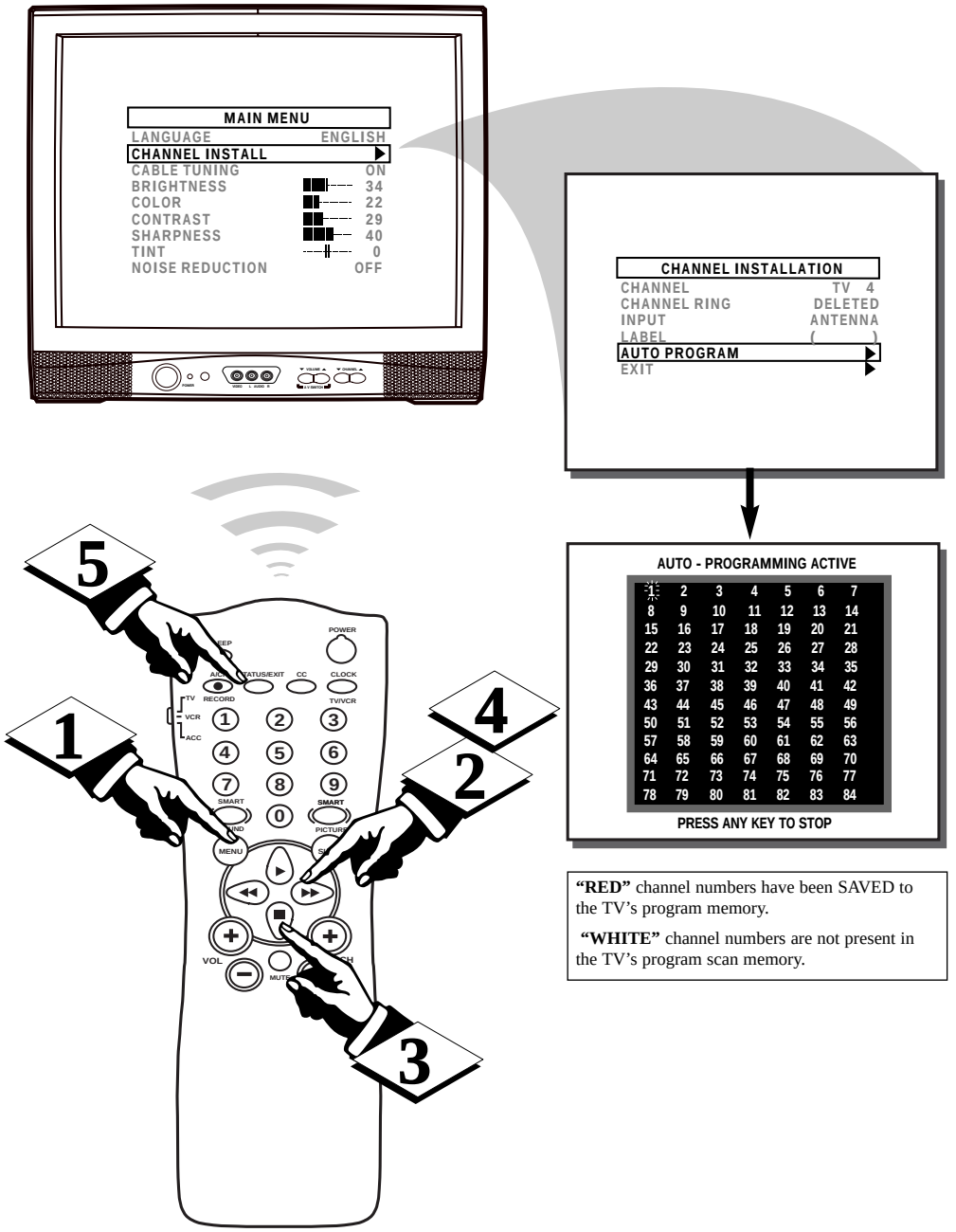
3 **Press the Menu, or Cursor Down (▼),** button to select AUTO PROGRAM with the highlight control bar.

4 **Press the Cursor Right (▶) or Left (◀)button on the remote** to start the TV's automatic search for area channels.

Flashing channel numbers will count upward on the screen as the TV looks for channels to "SAVE." Press any button (on the TV or the remote) to stop the channel search at any time. When the channel search is completed, the TV will return to normal channel viewing and operation.

5 **Press the STATUS** button to remove the on-screen menu.

STOP



"RED" channel numbers have been SAVED to the TV's program memory.

"WHITE" channel numbers are not present in the TV's program scan memory.

SMART HELP

Remember, if you want to drop any unwanted channels from the TV's memory, see the next page to "Manually" add and delete channels.

Note: As the TV searches for channels to "SAVE" into memory, the on-screen display may move (or jitter slightly). This is normal operation and does not indicate a need for service.

CHANNEL INSTALLATION: ADDING CHANNELS (MANUALLY)

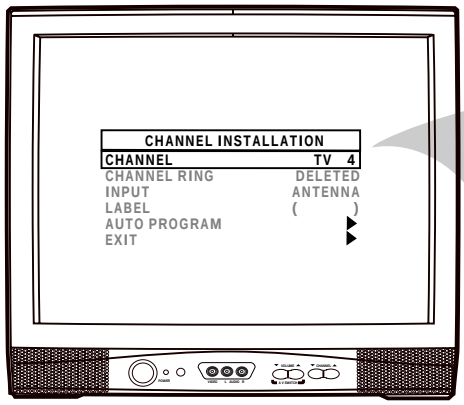
Auto Programming (see previous page) adds all the channels it can find (on your Antenna or Cable TV system) into the TV's memory. You may add other channels, or drop unwanted channels from the list of channels in the TV's memory.

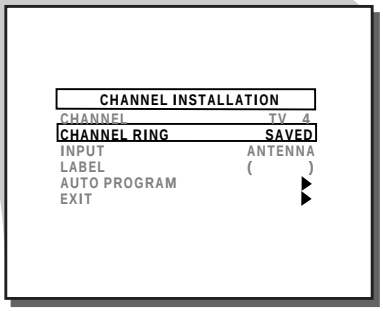
BEGIN

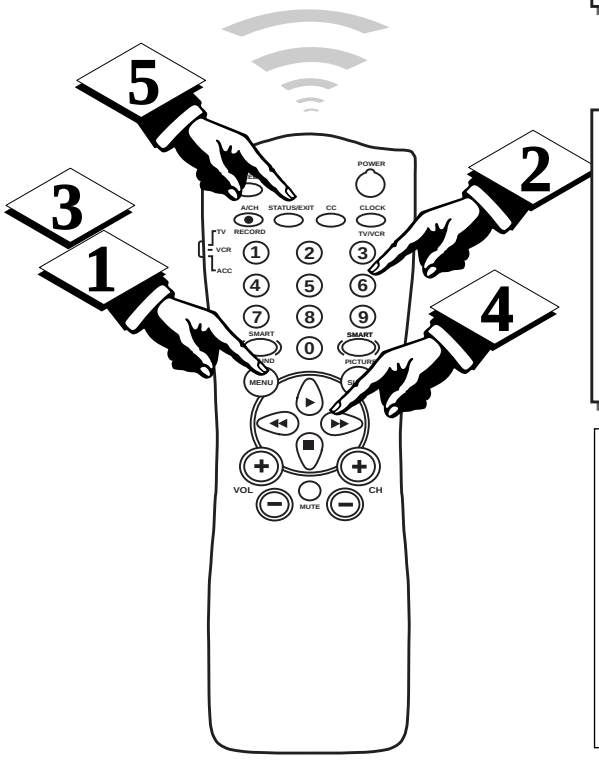
1. **With the Channel Installation Menu onscreen press the Menu button, or use the Cursor (▲) Up and Down (▼) buttons,** to select CHANNEL with the TV's highlight control bar.
2. **Press the Number, or CH(+,-), buttons** to select the channel you want to SAVE (or DELETE).
3. **Press the Menu, or Cursor Down (▼), button** to select CHANNEL RING with the highlight control bar.
4. **Press the Cursor Right (▶) or Left (◀)button on the remote to SAVE** (or DELETE) the selected channel number into memory.

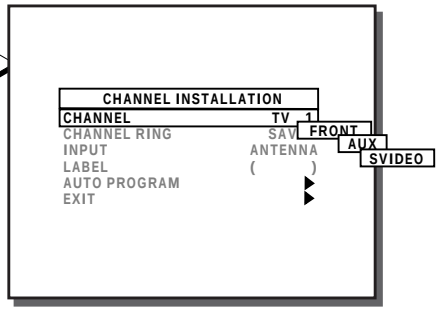
   Repeat steps 2-4 for each channel you wish to add (or delete).
5. **Press the STATUS/EXIT button** to remove the menu when you are finished.

STOP









Remember, you may add the FRONT (A/V); AUX(iliary); and S-VIDEO inputs into the TV's channel scan program memory. Then, by pressing the CH(annel) **+, -** buttons you may quickly select the Audio/Video Input jacks on the front and rear of the TV.

Select CHANNEL in the onscreen menu, then press the CH (+, -) buttons to select either FRONT (A/V)/ AUX(iliary)/ or S-VIDEO inputs. Note: The AUX(iliary) Video modes are located between the lowest and highest channel numbers within the CHANNEL control.

SMART HELP

Try it out. **Press the CH(annel) +, - buttons.** The channels you SAVED should appear. The channels you DELETED should not appear.

If you need to SAVE (or DELETE) a channel above 100, use the CH (+, -) buttons. The consumer remote control number buttons can not select channels above 99 (unless the 3 DIGIT ENTRY Commercial mode Menu control has been set to receive such channel entries).

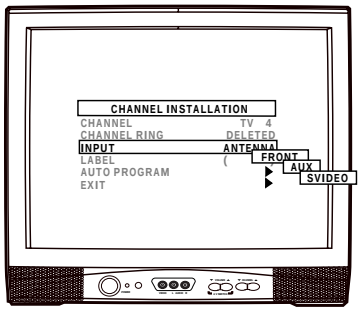
CHANNEL INSTALLATION: INPUT CONTROL

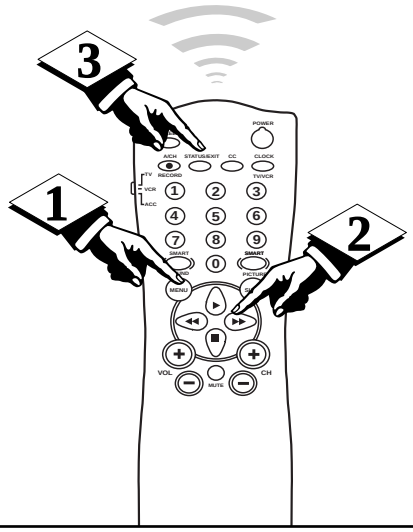
The Channel Installation Input control directs the TV to select an indicated input source (Auxiliary, Antenna, Front A/V, etc.) whenever a specific channel number is tuned.

BEGIN

1. **With the Channel Installation Menu onscreen press the Menu button, or use the Cursor (▲) Up and Down (▼) buttons,** to select INPUT with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀)button on the remote** to turn select the desired signal input mode (Antenna, Front A/V, etc.).
3. **Press the STATUS/EXIT button** to remove the menu.

STOP





SMART HELP

Remember, please refer to the additional setup and use information supplied with those models equipped with a ProKit 1, or other Smart Card Expansion Assembly, jackpanel. This information will detail all the various Audio and Video connections possible with this type of module.

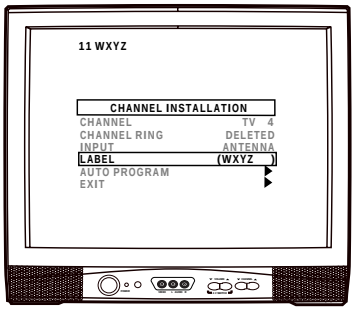
CHANNEL INSTALLATION: LABEL CONTROL

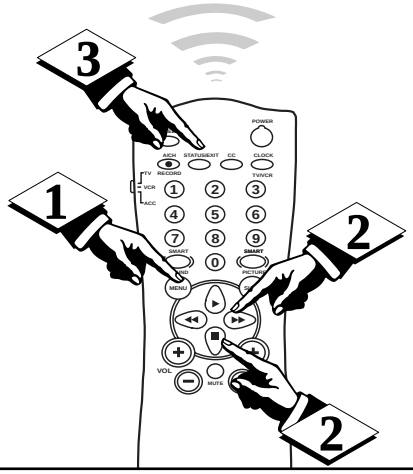
A Channel Label can be set for a symbol, letter, or number callout (up to eight characters in length) that will appear with the TV's onscreen channel numbers. Example: WXYZ - for a TV station's call letters.

BEGIN

1. **With the Channel Installation Menu onscreen press the Menu button, or use the Cursor (▲) Up and Down (▼) buttons,** to select LABEL with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀)button on the remote** to select the separate character spaces within the LABEL control. Use the Cursor (▲) Up and Down (▼) buttons to select the specific letters or symbols for the highlighted space.
3. **Press the STATUS/EXIT button** to remove the menu when completed.

STOP





SMART HELP

Remember, if you want to continue to write new Labels for additional channels, just press the Channel Number (or the CH +,-) buttons with the LABEL control highlighted. Then use the Cursor (▲) Up and Down (▼) buttons to select the characters for the next channel Label.

How to Adjust the TV Color

To adjust your TV color and picture controls, select a channel, then follow these steps:

BEGIN

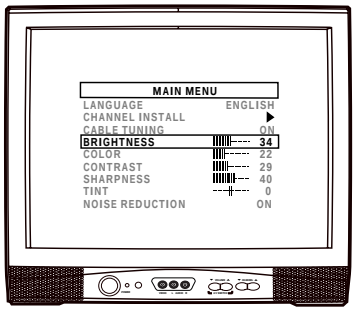
1. **With the Main Menu onscreen press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select the desired control (BRIGHTNESS, COLOR, etc.) with the TV's highlight control bar.

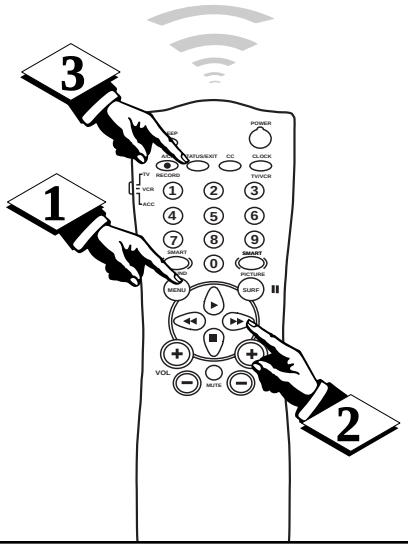
2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to adjust the control.

   The sliding bar scale, and number value indicator (0-63), will change onscreen as adjustments are made.

3. **Press the STATUS/EXIT button** to remove the menu when you are finished.

STOP





SMART HELP

Remember, when the bar scale is centered, the controls are at normal levels.

BRIGHTNESS - Press Cursor (▶) or (◀) until the darkest parts of the picture are as bright as you prefer.

PICTURE - Press Cursor (▶) or (◀) until the lightest parts of the picture show good detail.

COLOR - Press Cursor (▶) or (◀) to add or eliminate color.

TINT - Press Cursor (▶) or (◀) to obtain natural skin tones.

SHARPNESS - Press Cursor (▶) or (◀) to improve detail in the picture.

NOISE REDUCTION - Press Cursor (▶) or (◀) to reduce possible signal noise or interference in the picture.

Using the Stereo & SAP Controls

Your TV is able to receive broadcast stereo TV programs. The TV is equipped with an amplifier and twin speaker system through which the stereo sound can be heard.

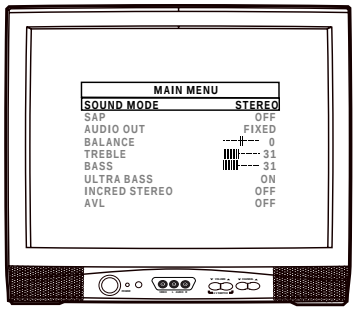
BEGIN

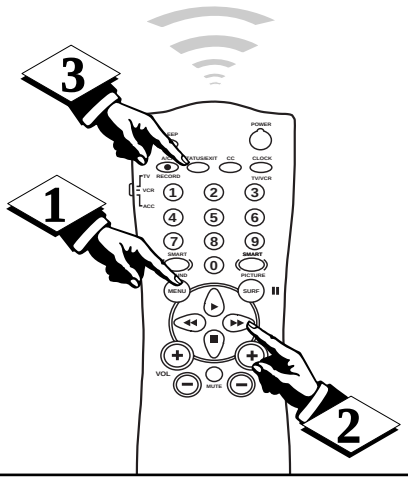
1. **With the Main Menu onscreen press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select the SOUND MODE control with the TV's highlight control bar.

2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to turn ON the Stereo mode.

3. **Press the STATUS/EXIT** button to remove the menu.

STOP





SMART HELP

Note: Second Audio Program (SAP) is part of the stereo broadcast system. Sent as an additional audio channel SAP can be heard apart from the current TV program sound. TV stations are free to use SAP for any number of purposes, but many experts believe it will be used for foreign language translations of TV shows (or for weather and news bulletins).
If a SAP signal is not present with a selected program the SAP option cannot be selected

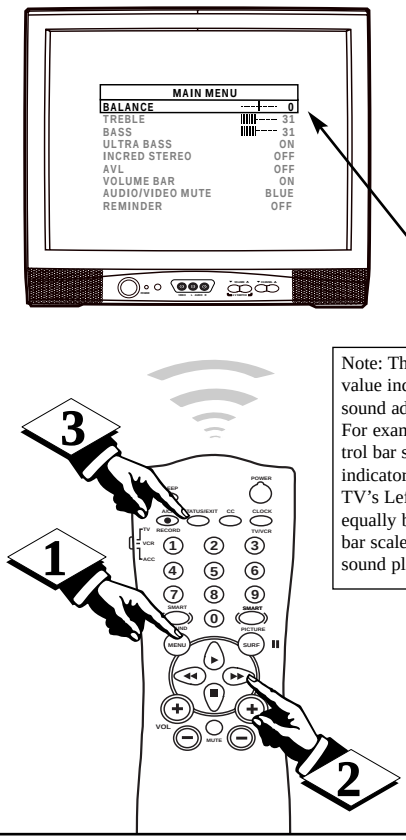
USING THE BASS, TREBLE, BALANCE CONTROLS

Your TV has individual sound adjustment controls. The speaker BALANCE, TREBLE (high frequency), and BASS (low frequency) controls may be used to adjust the sound quality of TV programs.

BEGIN

1. **With the Main Menu onscreen press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select the BALANCE (TREBLE or BASS) control with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to adjust the sound to the level you prefer.
3. **Press the STATUS/EXIT** button to remove the menu.

STOP



Note: The sliding bar scale (and number value indicator) will change onscreen as sound adjustments are made.
For example: with the BALANCE control bar scale set to center (0 number indicator), the sound coming from the TV's Left and Right cabinet speakers are equally balanced. Move the BALANCE bar scale control to the Right or Left and sound playback will shift accordingly.

SMART HELP

Remember, Besides normal BASS sound control adjustments, you also can set an Ultra Bass audio range control that will create an even deeper, fuller low frequency playback sound which can be heard through your TV speakers.

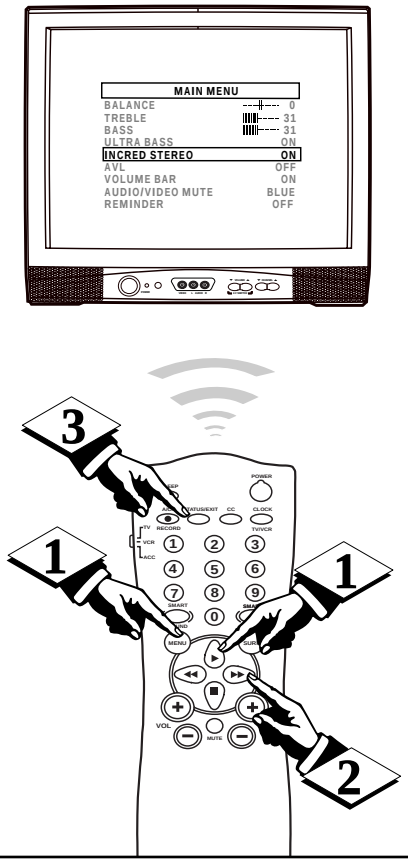
HOW TO SET THE INCREDIBLE STEREO CONTROL

Your TV has already been preset at the factory for a full-time Stereo mode setting. But you can add even greater depth and dimension to TV program sound reception by using the Incredible Stereo sound control.

BEGIN

1. **With the Main Menu onscreen press the Menu button repeatedly , or use the Cursor (▲) Up and Down (▼) buttons,** to select INCREDIBLE STEREO with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀)button on the remote** to turn INCRED. STEREO On (or Off).
3. **Press the STATUS/EXIT button** to remove the menu.

STOP



SMART HELP

Remember, with the Incredible Stereo control turned ON even monaural (mono) audio source material can be heard through the rear External Speaker sound connection terminals on the TV.

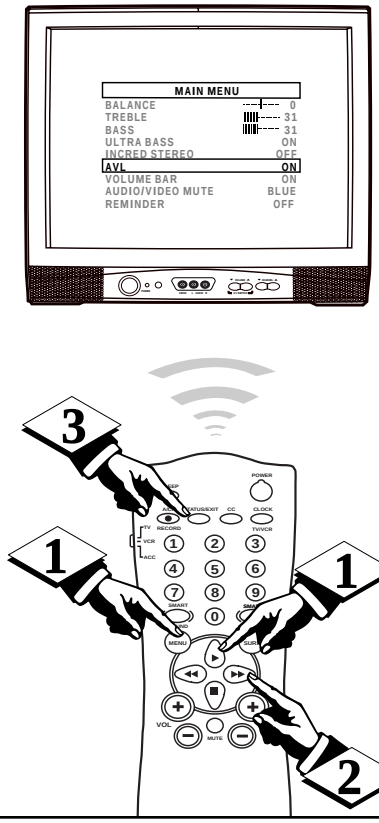
USING THE AUTOMATIC VOLUME LIMITER (AVL) CONTROL

Automatic Volume Limiter (AVL) allows you to preset a desired volume level that the TV sound will not go above or exceed. This makes for an even, more consistent sound by reducing the "peaks" and "valleys" that can occur during commercials and other program breaks.

BEGIN

1. **With the Main Menu onscreen press the Menu button repeatedly , or use the Cursor (▲) Up and Down (▼) buttons,** to select AVL with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to turn the AVL control On (or Off).
3. **Press the STATUS/EXIT** button to remove the menu.

STOP



SMART HELP

Remember, AVL works for sound levels coming from the Antenna/Cable Input on the rear of the TV (RF Audio), or the AUX(iliary) audio inputs for models that are properly equipped (with jackpanel expansion kit modules such as Pro Kit 1).

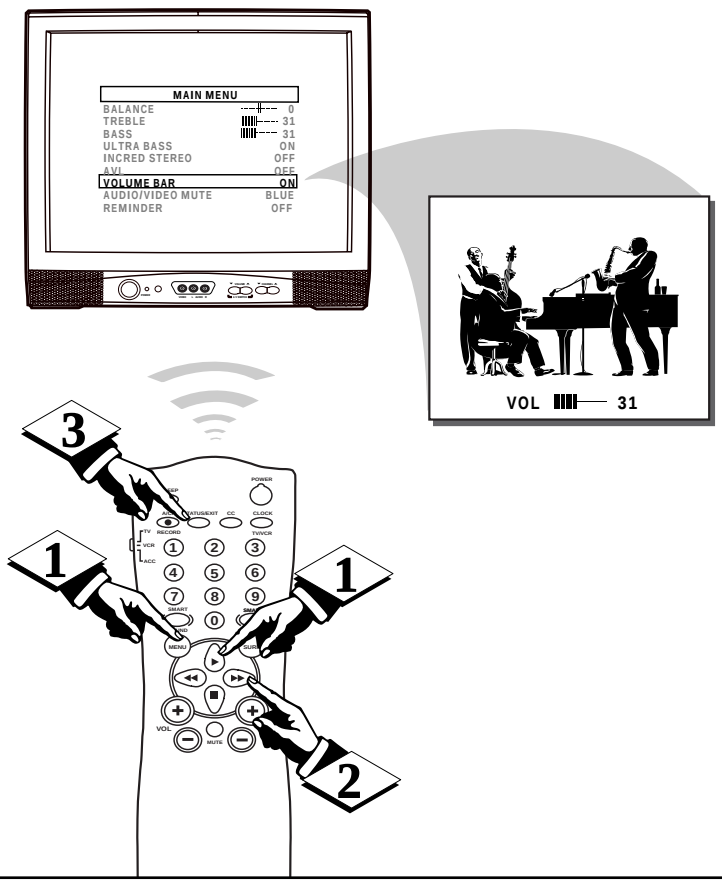
USING THE TV VOLUME BAR CONTROL

Use the Volume Bar control to see the TV's volume level settings on the TV screen. The Volume Bar will appear when the VOL(ume) buttons are pressed.

BEGIN

1. **With the Main Menu onscreen press the Menu button repeatedly , or use the Cursor (▲) Up and Down (▼) buttons,** to select VOLUME BAR with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀)button on the remote** to turn VOLUME BAR control On (or Off).
3. **Press the STATUS/EXIT button** to remove the menu.

STOP



SMART HELP

Try it out. Press the VOL(ume) ▲ Up and Down ▼ buttons. The Volume Bar should appear onscreen.

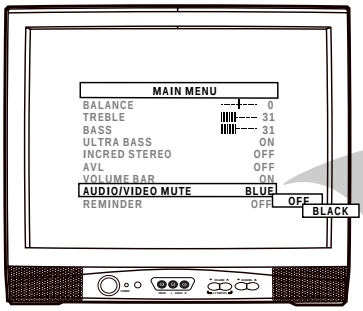
USING THE AUDIO/VIDEO MUTE

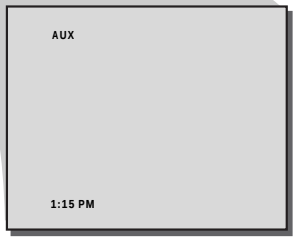
You can use the Audio/Video Mute control option to set the background color for the TV screen (when the TV is set to a blank channel that is not receiving an active video signal).

BEGIN

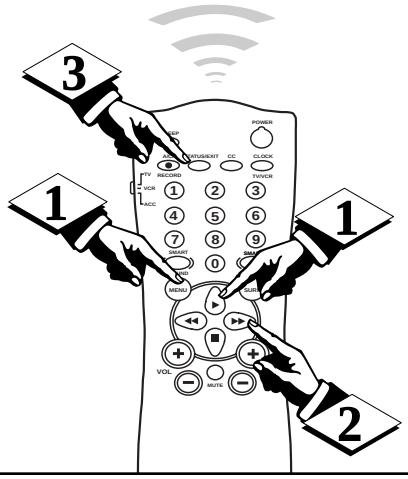
1. **With the Main Menu onscreen press the Menu button repeatedly , or use the Cursor (▲) Up and Down (▼) buttons,** to select AUDIO/VIDEO MUTE with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀)button on the remote** to set AUDIO/VIDEO MUTE control to Blue, Black, or Off (normal static appears with non active channels).
3. **Press the STATUS/EXIT button** to remove the menu.

STOP





Selected Background Color appears on channels that do not receive a signal.



SMART HELP

Try it out. Press the CH (+, -) buttons. The TV's background screen will appear in the selected color for nonactive TV channels.

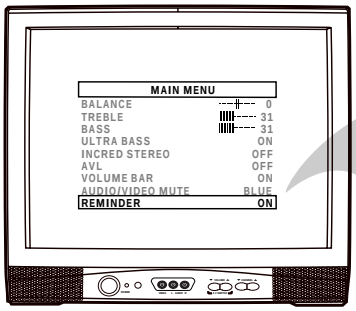
HOW TO SET THE CHANNEL REMINDER

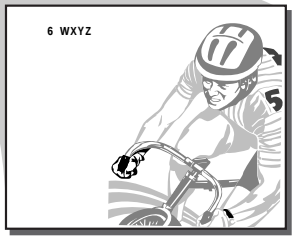
With the Channel Reminder control On the current channel number (with a Label callout, if it also has been previously set) will remain onscreen during normal TV operation and use.

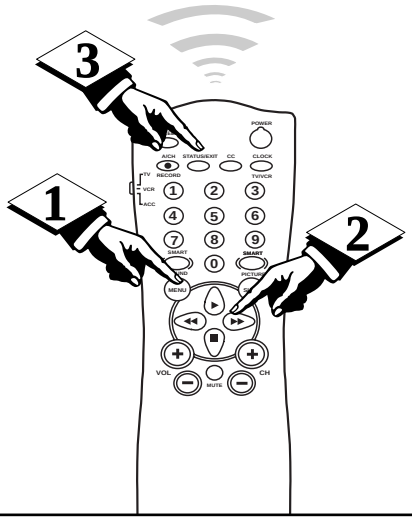
BEGIN

1. **With the Main Menu onscreen press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select REMINDER with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to turn the REMINDER control On (or Off).
3. **Press the STATUS/EXIT** button to remove the menu.

STOP







SMART HELP

The Clock Display control can also be used to view current time settings onscreen if desired. (See page 22 for details).

How to Select the Closed Caption Feature

Closed Captioning allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, this feature uses on-screen "text boxes" to show dialogue and conversations while the TV program is in progress.

BEGIN

1 **Press the CC button on the remote, or use the Menu button and Main Menu,** to select CC (Close Caption) with the TV's highlight control bar.

2 **Press the Cursor Right (▶) or Left (◀)button on the remote** to select the desired Closed Caption (CC) mode, for example, CC-1.

CC- 1, 2 modes:
Dialogue and descriptions for the program appear on-screen. Note: Usually CC-1 is the most used mode to view captioned material.

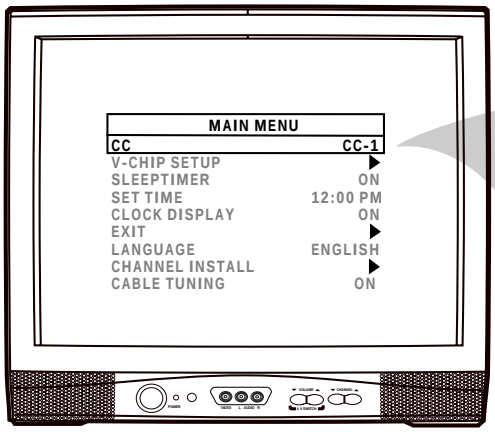
CC ON MUTE:
Used to set the TV to turn On the Closed Caption mode whenever the MUTE button on remote is pressed.

3 **Press the STATUS/EXIT button** after you select a mode. The menu will disappear and Closed Captioning (if available for the currently selected TV program) will appear on the TV screen.

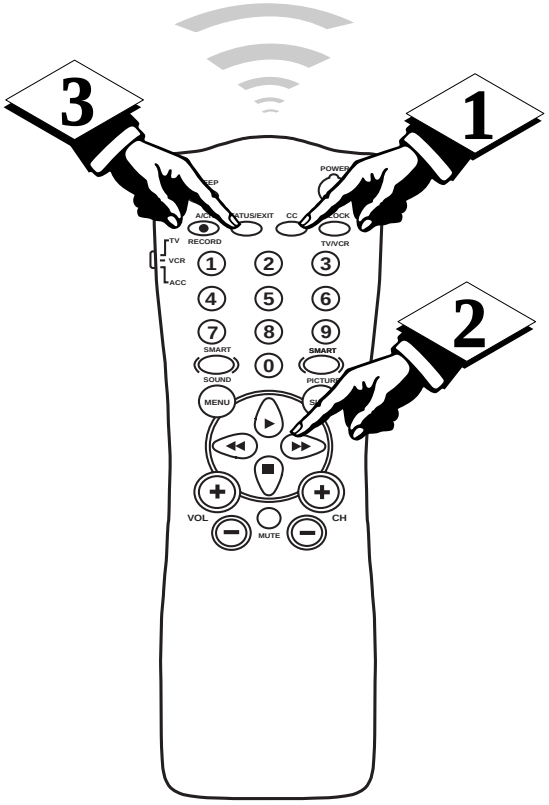
To cancel Closed Captioning, select OFF at step 2 above.

STOP

NOTE: Not all TV programs and product commercials are broadcast with Closed Caption (CC) information included. Neither are all Closed Caption modes (CC 1 and CC 2) necessarily being used by a broadcast station during the transmission of a closed caption program. Refer to your area's TV program listings for the stations and times of Closed Caption shows.



CLOSE CAPTION (CC-1) mode
Example Display



Smart Help

Remember, broadcast stations will often use spelling abbreviations, symbols, dropouts, and other grammatical shortcuts in order to keep pace with the on-screen action. These factors vary upon the source of the captioned text material and do not indicate a need for TV service.

A new Program Content Advisory system is available to censor TV program material for viewing. TV Ratings and Movie Ratings advisory data will soon be contained within the broadcast signals of received TV programs. When setup by the viewer, the TV can respond by blocking or denying access to TV shows (based on whether the program meets or exceeds the limitations you select as viewable). Refer to the following page sections for explanations on the different Rating system levels and their uses.

BEGIN

1 **With the Main Menu onscreen press the Menu button repeatedly , or use the Cursor (▲) Up and Down (▼) buttons,** to select V-CHIP SETUP with the TV's highlight control bar.

2 **Press the Cursor Right (▶) or Left (◀) button on the remote** to select the V-CHIP SETUP controls screen.

3 **Press the Menu button, or use the Cursor (▲) Up and Down (▼) buttons,** to select the Master Disable control.

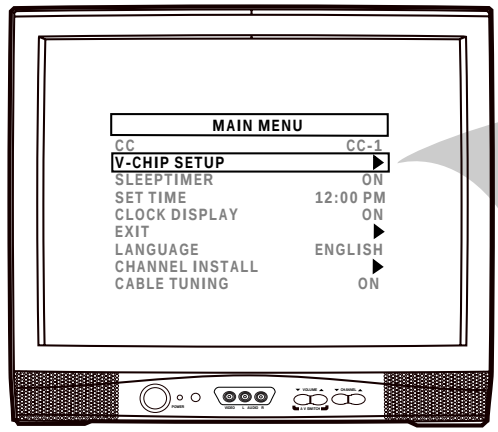
4 **Press the Cursor Right (▶) or Left (◀) button** to turn the Master Disable control Off (or On).

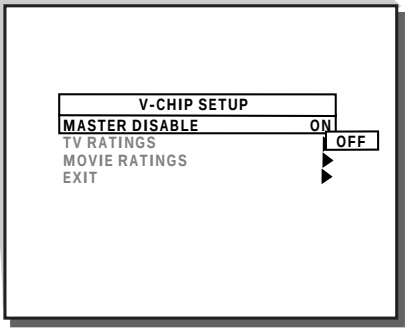
With Master Disable in the "OFF" position: All specific TV and Movie Rating settings for blocking or censoring of programs will take place.

With Master Disable in the "ON" position: All specific TV and Movie Rating settings for blocking or censoring of programs will not take place (or be disabled).

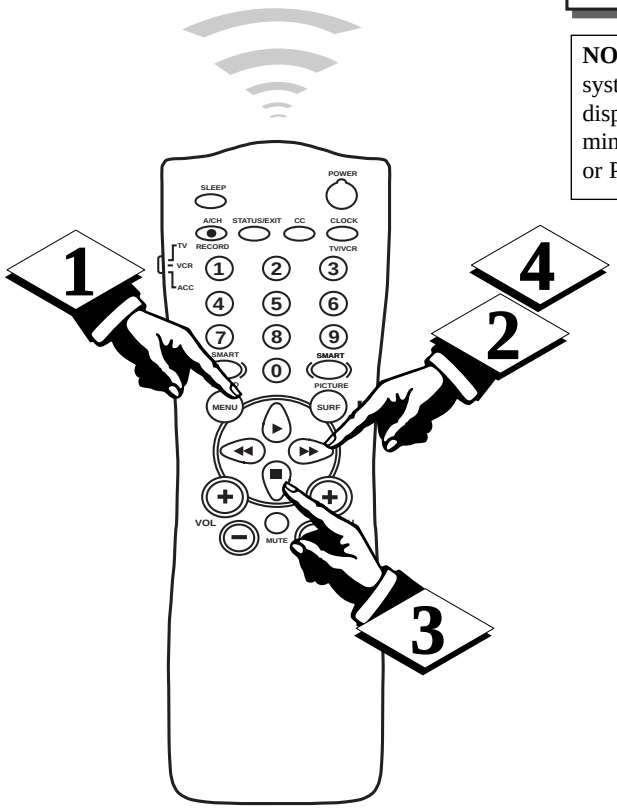
Continue to the next page for complete details on the specific TV Rating and Movie Rating settings.

STOP





NOTE: In normal Content Advisory system operation the TV screen will display a message when programming is blocked by a Movie Rating or Parental Guideline.



USING THE V-CHIP TV RATINGS CONTROL

The TV Ratings control can be very specific in the degree and extent of program material censored for TV viewing. Sub-settings fora variety of blocking factors can be manually switched On or Off for use within the major TV Ratings categories (TV-Y7, TV-PG, etc.).

BEGIN

1. **With the V-CHIP SETUP Menu onscreen press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select TV RATINGS with the TV's highlight control bar.

2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to use the TV RATINGS selection chart.

3. **Press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select the desired TV RATINGS level. For example, TV-PG.

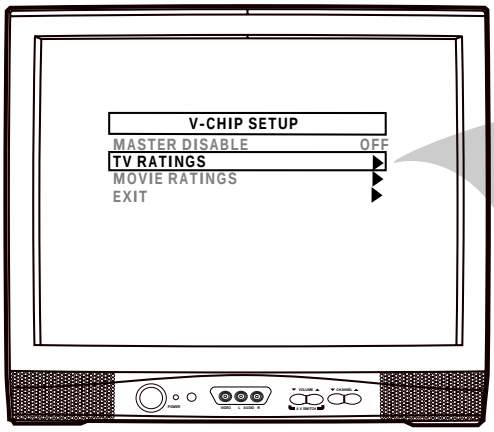
4. **Press the Cursor Right (▶) button on the remote** to select the specific category (ALL, V, S, L, D) within the TV RATING. A blinking indicator will show which category bracket is active.

5. **Press the Menu button, or use Cursor (▲) Up and Down (▼), on the remote** to select (X) the specific blocking category for use.

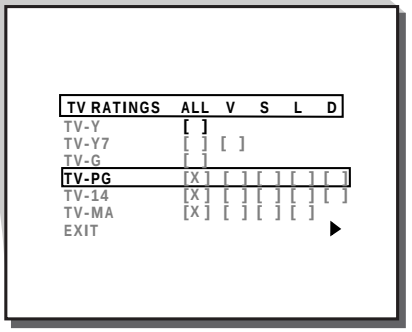
   Note: Selecting "ALL" (or individually adjusting the V, S, L, D settings) for any one rating will set all other higher level ratings to be automatically blocked as well.

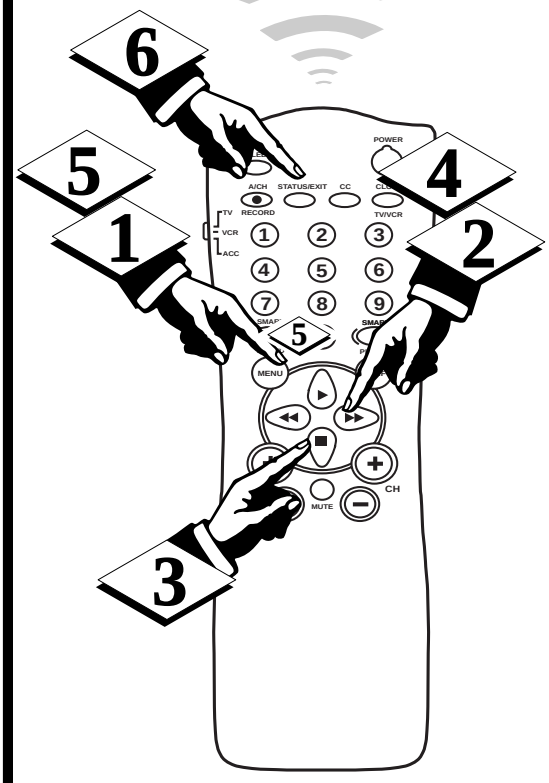
6. **Press STATUS/EXIT** to save the specific TV Rating setting. Then press the remote control Cursor buttons to move to the next category area for setup or use.

STOP



The TV-Y7; TV-PG; TV-14; and TV-MA guidelines also include customized settings for various additional items such as V (violence), S (sexual situations), L (coarse language), and D (suggestive dialogue). These additional settings are category specific and can be individually selected for use as desired.





- **TV-Y - Appropriate for all children:** Designed for a very young audience, including children ages 2-6. This type of programming is not expected to frighten younger children.
- **TV-Y7 -Appropriate for children seven and older:** It may be more appropriate for children who have acquired the development skills needed to distinguish between make-believe and reality. This programming may include mild fantasy and comic violence.
- **TV-G - General Audience:** This type of programming contains little or no violence, no strong language, and little or no sexual dialogue or situations.
- **TV-PG - Parental Guidance suggested:** This type of programming contains one or more of the following: Moderate violence (V), some sexual situations (S), infrequent coarse language (L), or some suggestive dialogue (D).
- **TV-14 - Unsuitable for children under 14:** This type of programming contains one or more of the following: intense violence (V), intense sexual situations (S), strong coarse language (L), or intensely suggestive dialogue (D).
- **TV-MA - Mature audience only:** This type of programming contains one or more of the following: graphic violence (V), explicit sexual situations (S), or crude indecent language (L).

- **(V) - Violence**
- **(S) - Sexual situations**
- **(L) - Language**
- **(D) - Inappropriate dialogue**

USING THE V-CHIP MOVIE RATINGS CONTROL

Movie Ratings set viewing access levels for TV programming according to current Motion Picture Association of America (MPAA) ratings. These ratings are similar to the categories used with the rated movies appearing in cinema theaters and with video rental material.

BEGIN

1. **With the V-CHIP SETUP Menu onscreen press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select MOVIE RATINGS with the TV's highlight control bar.

2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to use the MOVIE RATINGS selection chart.

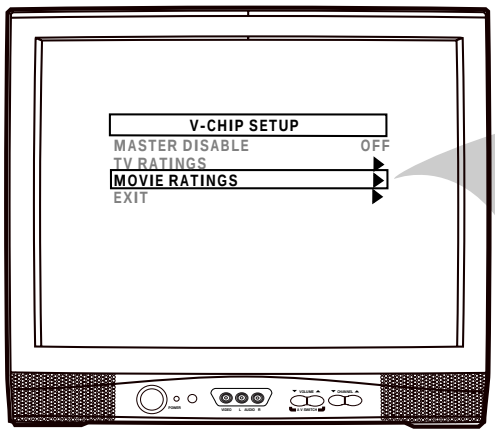
3. **Press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select the desired MOVIE RATINGS level. For example, R.

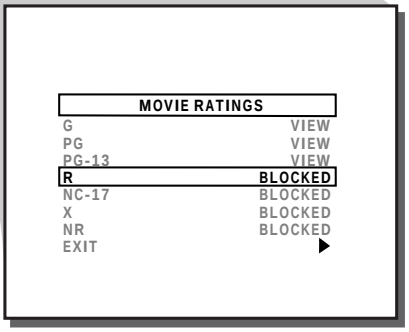
4. **Press the Cursor Right (▶) or Left (◀) button on the remote** to BLOCK (or VIEW) the selected Movie category.

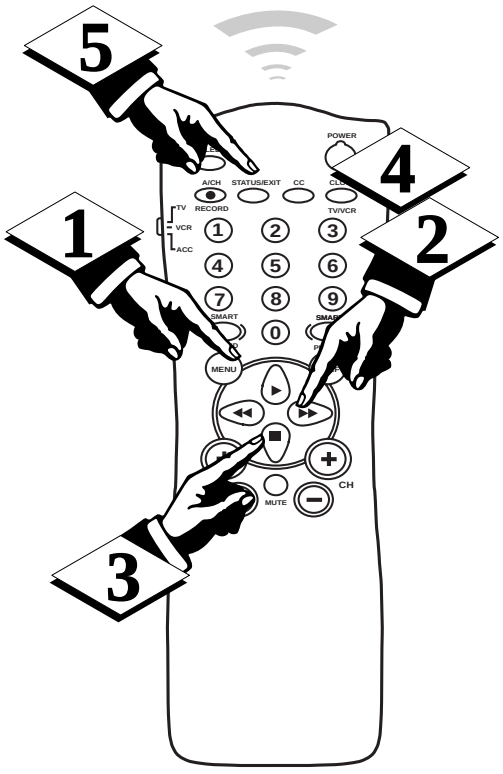
   Note: When a selected Movie Rating is "BLOCKED" all higher level ratings are automatically blocked as well (although each individual Movie Rating can be manually selected and turned On or Off as desired). Programs with lower than the selected rating level are allowed for viewing or unblocked.

5. **Press STATUS/EXIT** to save the Movie Ratings settings and return to the V-CHIP Setup Menu screen.

STOP







- **G - General Audience:** Most parents would find this program suitable for all ages. This type of programming contains little or no violence, no strong language, and little or no sexual dialogue or situations.
- **PG - Parental Guidance:** This programming contains material that parents may find unsuitable for younger children. It may contain one or more of the following: Moderate violence, some sexual situations, infrequent coarse language, or some suggestive dialogue.
- **PG-13**: This programming contains material that parents may find unsuitable for children under the age of 13. It contains one or more of the following: violence, sexual situations, coarse language, or suggestive dialogue.
- **R - Restricted:** This programming is specifically designed for adults. Anyone under the age of 17 should only view this programming with an accompanying parent or adult guardian. It contains one or more of the following: intense violence, intense sexual situations, strong coarse language, or intensely suggestive dialogue.
- **NC-17 - No one under 17 admitted**: This type of programming should be viewed by adults only. It contains graphic violence, explicit sex, or crude indecent language.
- **X - Mature audience only**: This type of programming contains one or more of the following: very graphic violence, very graphic and explicit or indecent sexual acts, very coarse and intensely suggestive language.
- **NR - No Rating**: Broadcasters can decide **not to encode** any kind of content advisory ratings with their programming. The NO RATING (NR) Movie category allows the viewer the option to block any movie broadcast without content advisory data included.

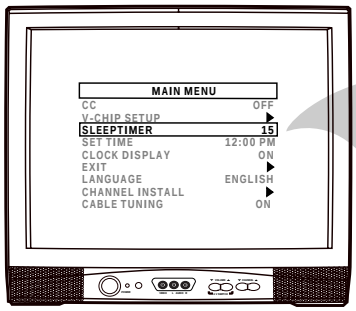
SETTING THE SLEEP TIMER

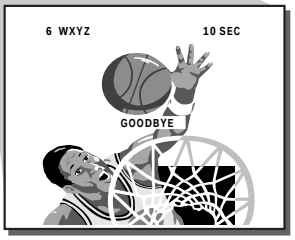
Have you ever fallen asleep in front of the TV, only to have it wake you up at two in the morning with a test pattern screeching in your ears? Well, your TV can save you all that trouble by automatically turning itself off.

BEGIN

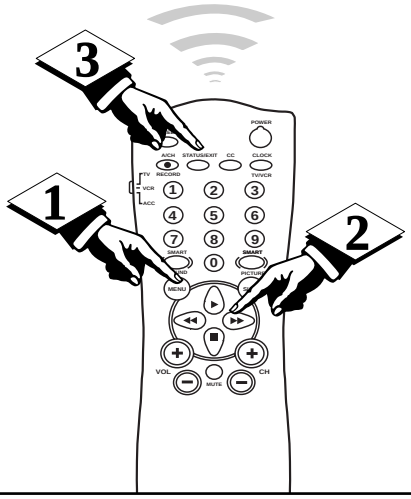
1. **With the Main Menu onscreen press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select SLEEPTIMER with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to select the amount of time before you want the TV to shut itself off (between 15 minutes and 240 minutes).
3. **Press STATUS/EXIT** to remove the menu.

STOP





An onscreen countdown will appear on the TV during the last minute before the set is to shut off. A "GOODBYE" message will also show onscreen during the last ten seconds of the countdown.



SMART HELP

Remember, you can refer to the Sleeptimer Menu control to see how many minutes are left before the TV shuts itself off.

To cancel a SLEEP TIMER setting: select OFF at step 2; or, pressing a button on the TV or remote during the last minute of the Sleeptimer countdown will cancel a setting; or, turning the TV off, then on again, will also cancel a setting.

USING THE SET TIME & CLOCK DISPLAY CONTROLS

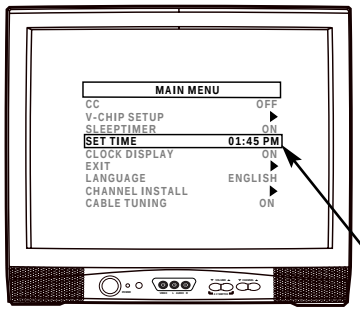
Your TV has an on-screen clock. During normal use the clock appears onscreen with every channel change (and when the STATUS button is pressed).

BEGIN

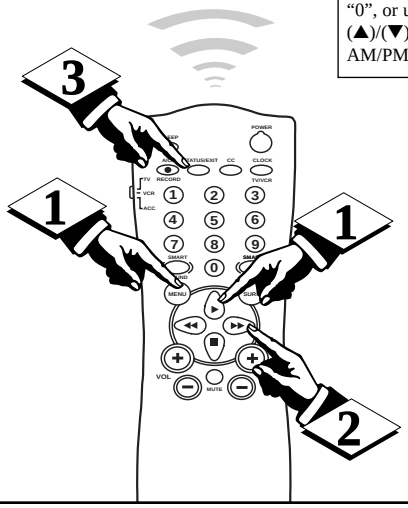
1. **With the Main Menu onscreen press the Menu button repeatedly , or use the Cursor (▲) Up and Down (▼) buttons,** to select SET TIME with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to select the onscreen clock for adjustment.
3. **Press the remote's number buttons**, or use the Cursor (▲) Up and Down (▼) buttons, to enter the current time. (Press "0" first for single-digit hour entries.)

Press the STATUS/EXIT button to remove the menu and start the clock.

STOP

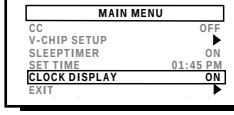


Press the number "1" and "0", or use the Cursor (▲)/(▼), buttons for the AM/PM clock settings.



SMART HELP

Remember, in order for the clock to appear on the TV screen, with channel changes, etc., the CLOCK DISPLAY Menu control must also be set to the ON position.



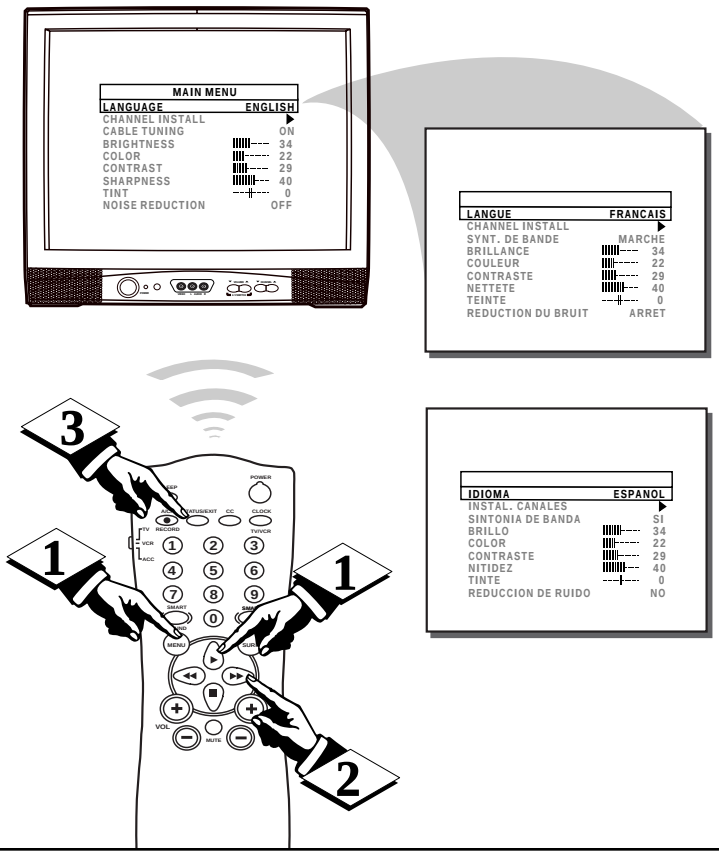
How to Use the On-Screen Language Option

For our French and Spanish speaking TV owners, an on-screen LANGUAGE option is available. You may set the TV's onscreen menu to appear in either English, French, or Spanish text.

BEGIN

1. **With the Main Menu onscreen press the Menu button repeatedly, or use the Cursor (▲) Up and Down (▼) buttons,** to select LANGUAGE with the TV's highlight control bar.
2. **Press the Cursor Right (▶) or Left (◀) button on the remote** to select English, French (FRANCAIS), or Spanish (ESPANOL). Text in the onscreen Menu will appear in the selected language.
3. **Press STATUS/EXIT** to remove the menu.

STOP



Smart Help

Remember, the Language control only makes the TV's onscreen Menu items appear in French or Spanish text. It does not change the language of other onscreen text features, such as Closed Captioning.

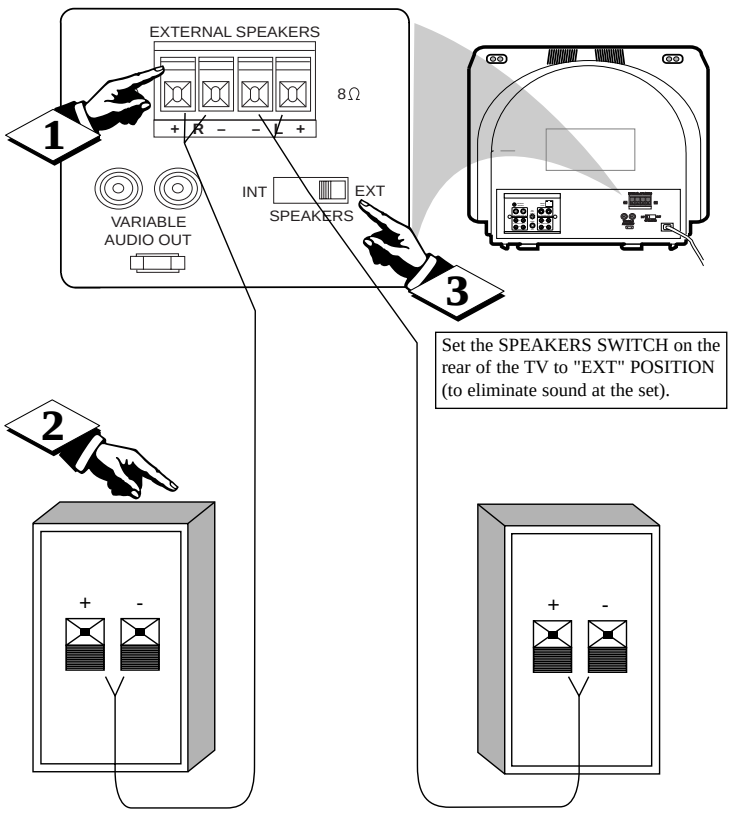
Using the External Speaker Terminals

A set of External Speaker terminals is located on the rear of the TV. These speaker terminals allow you to connect optional external speakers for Right/Left channel stereo sound.

BEGIN

1. **Connect both external speakers** to the correct EXTERNAL SPEAKER (Left/Right) terminals on the TV. See Smart Help Note for additional details on connections.
2. **Place the external speakers** to maximize the Left and Right channel stereo sound separation (within current room dimensions).
3. **Set the SPEAKERS switch** (on the rear of the TV) to the "EXT(ernal)" position.

STOP



Smart Help

Remember, be sure the (+) and (-) speaker wires are connected to the correct R(ight) and L(eft) speaker terminals on the TV. Recommended speakers are 8 ohm, 15 watt minimum.

Note: Lift up on the (Red & Black) Speaker Wire Clamps when inserting the speaker wire into the correct terminal. Press the Clamp back down to secure the wire in place.

USING THE AUDIO OUTPUT JACKS

Would you like to hear TV programs through your audio hi-fi system? The TV's Audio Output jacks offer you this sound playback option.

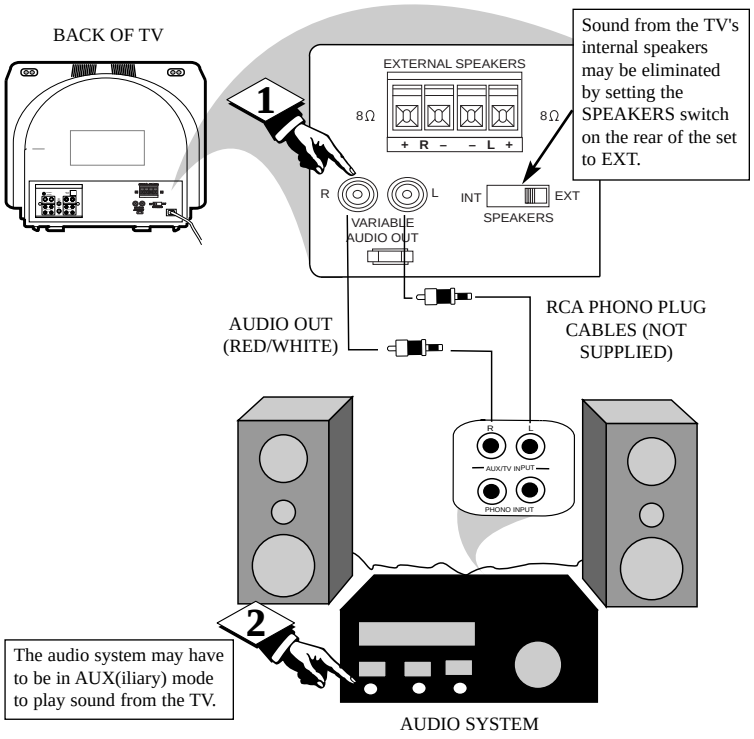
BEGIN

1. **Connect the R(ight) and L(eft) VARIABLE AUDIO OUT** jacks on the TV to the R and L Audio Input jacks on your amplifier or sound system.

   Set the audio system's volume to normal listening level.

2. **Turn On the TV and the audio system.** You can now adjust the sound level coming from the audio system with the Volume ▲▼ buttons on the TV or remote. (Also see the Smart Help section for further audio mode and sound adjust details.

STOP


BACK OF TV
EXTERNAL SPEAKERS
8Ω
8Ω
+ R – – L +
R
L
INT
EXT
SPEAKERS
VARIABLE AUDIO OUT
Sound from the TV's internal speakers may be eliminated by setting the SPEAKERS switch on the rear of the set to EXT.
AUDIO OUT (RED/WHITE)
RCA PHONO PLUG CABLES (NOT SUPPLIED)
AUX/TV INPUT
PHONO INPUT
The audio system may have to be in AUX(iliary) mode to play sound from the TV.
AUDIO SYSTEM

SMART HELP

Note: You can use the TV's AUDIO OUT Menu control to set the rear Audio Outputs to operate in either a Fixed or Variable sound mode. "VARIABLE" allows you to adjust the playback of program sound using TV's Volume control buttons. "FIXED" is intended to make sound adjustments on the external Audio System equipment.

USING THE FRONT AUDIO/VIDEO INPUT JACKS

For more convenient Direct playback connections the TV's Front Input jackpanel can be used. These easily accessed Audio/Video Inputs allow for quick playback connections, particularly for viewing of Camcorder tape recordings.

BEGIN

1. **Connect the VIDEO OUT** jack from the Camcorder to the VIDEO IN jack on the front of the TV.

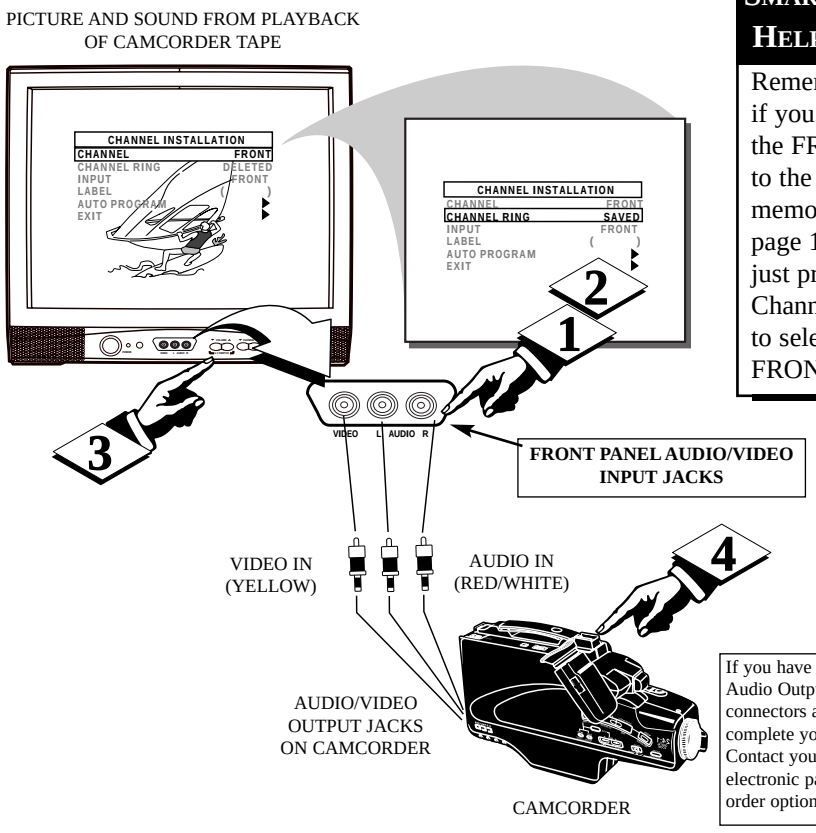
2. **Connect the AUDIO OUT** jacks R(ight) and L(eft) from the Camcorder to the AUDIO IN jacks on the front of the TV.

3. **Select the "FRONT" INPUT source** control on the TV.

   Note: You can use the A/V SWITCH buttons on the front of the TV. (Or, you can Save the FRONT Inputs as part of the TV's Channel Ring. See Smart Help).

4. **Turn the Camcorder ON** and press PLAY to view the tape on the TV.

STOP


PICTURE AND SOUND FROM PLAYBACK OF CAMCORDER TAPE
CHANNEL INSTALLATION
CHANNEL FRONT
CHANNEL RING DELETED
INPUT FRONT
LABEL ( )
AUTO PROGRAM
EXIT
CHANNEL INSTALLATION
CHANNEL FRONT
CHANNEL RING SAVED
INPUT FRONT
LABEL ( )
AUTO PROGRAM
EXIT
VIDEO L AUDIO R
FRONT PANEL AUDIO/VIDEO INPUT JACKS
VIDEO IN (YELLOW)
AUDIO IN (RED/WHITE)
AUDIO/VIDEO OUTPUT JACKS ON CAMCORDER
CAMCORDER
If you have a single (monaural) Audio Output Camcorder, "Y" connectors are available to complete your connection. Contact your dealer, or local electronic parts supply store, to order optional accessories.

SMART HELP

Remember, if you have added the FRONT Inputs to the TV's channel memory ring (see page 12), you can just press the Channel +,- buttons to select the FRONT A/V mode.

SETTING THE REMOTE CONTROL TO WORK WITH OTHER DEVICES

Your remote control is set to work your TV and many infrared remote (IR) control VCRs, Cable Boxes, Satellite Systems, DBS, DVD, etc. However, an easy onetime step may be necessary before the remote will work your accessory.

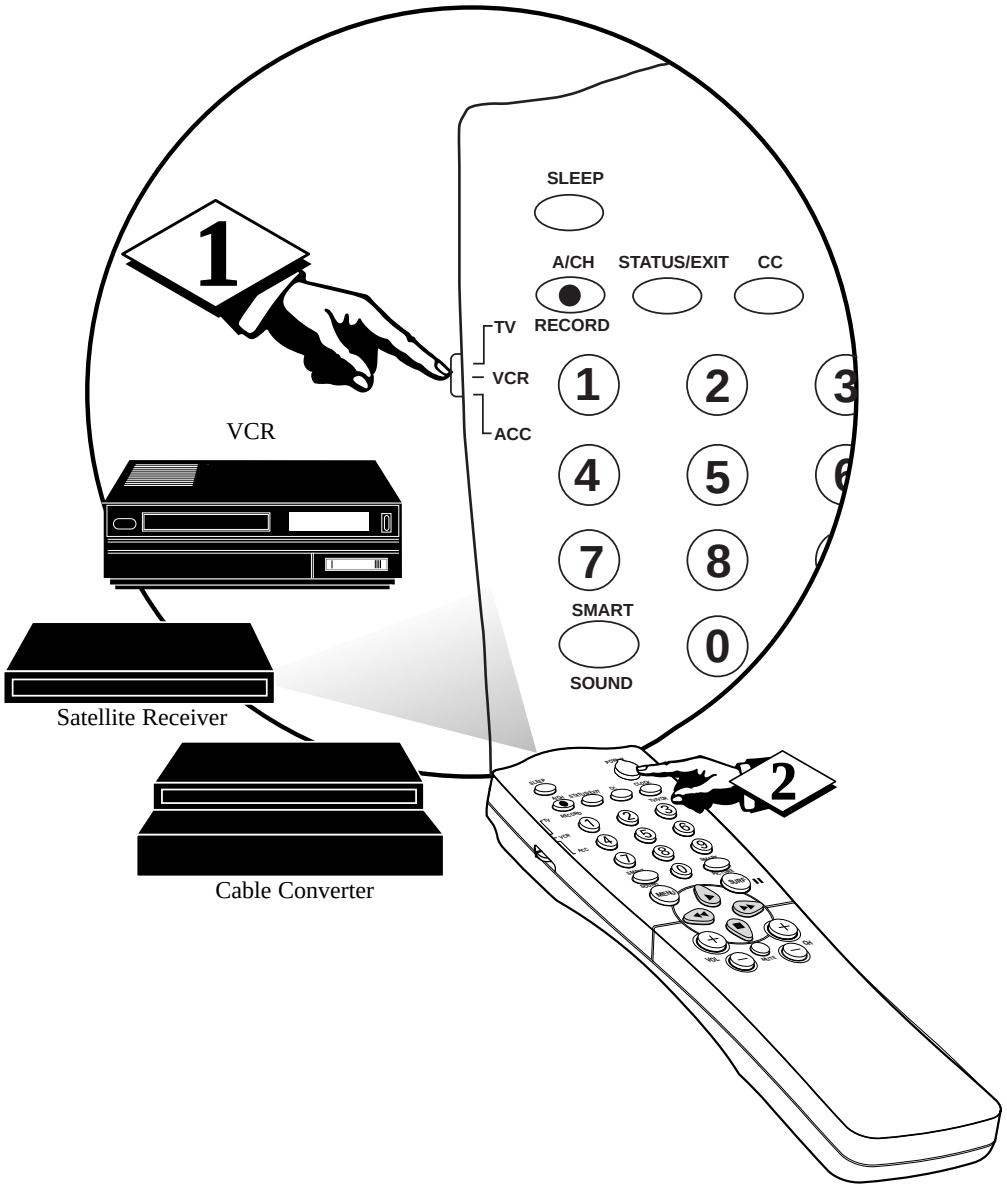
Try this initial check to see if going on to the following section is necessary.

BEGIN

1. **Place the TV/VCR/ACC Mode Switch** in the proper position.
2. **Point the remote control** at the device and press the POWER button.
3. Does the remote turn the device ON?

If YES, stop and try other function buttons on the remote. If they also work the device, then the remote is ready and no further steps are needed.

If NO, continue...



1. First look up a **THREE-DIGIT remote control number** for your brand of Device before going through the simple steps on the following page.

Find your Accessory Device Three-Digit Codes listed on pages 28-29.

SMART HELP

Remember, if more than one number is listed, you may have to try more than the first Three-Digit code given in order to locate your Device's proper remote code.

SETTING THE REMOTE CONTROL TO WORK WITH OTHER DEVICES

Direct Access Method

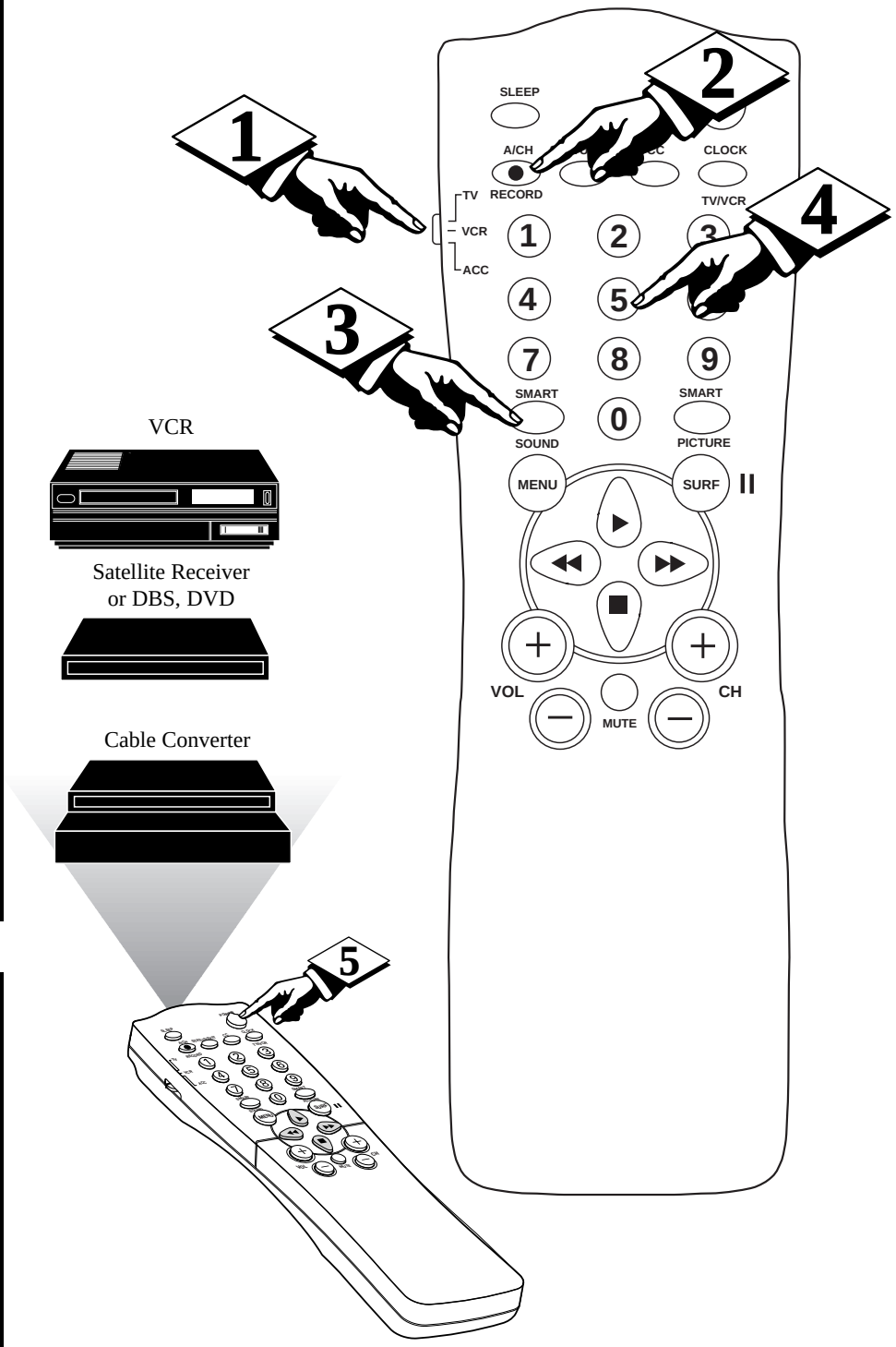
Now that you have looked up the three-digit Remote Code Number for your brand of device, you are ready to follow the simple steps shown below.

Please read through steps 1-4 before beginning.

BEGIN

1. **Place the TV/VCR/ACC Mode Switch** in the proper position.
2. **Press the (A/CH) • RECORD button** on the remote control and release.
3. **Press the SmartSound button** on the remote within 30 seconds, then release.
4. **Enter the THREE-DIGIT REMOTE CODE NUMBER** for your desired device. The remote is now ready to send commands to the unit.
5. **Point the remote** at the Device. Press the POWER button on the remote to turn the unit ON.

STOP



SMART HELP

Remember, if this doesn't work the first time, repeat steps using the same remote code number.

After a second try and the remote does not operate your device, see if there is another three-digit code number listed for your device and repeat the steps above using the new number.

If after repeated attempts the code number method does not work your device, try the **SEARCH METHOD** on the following page.

SETTING THE REMOTE CONTROL TO WORK WITH OTHER DEVICES

Search Method

Your TV remote can be set to work various external devices such as VCRs, Cable Boxes, Satellite Receivers, DBS, DVD, etc. by what is called the search method.

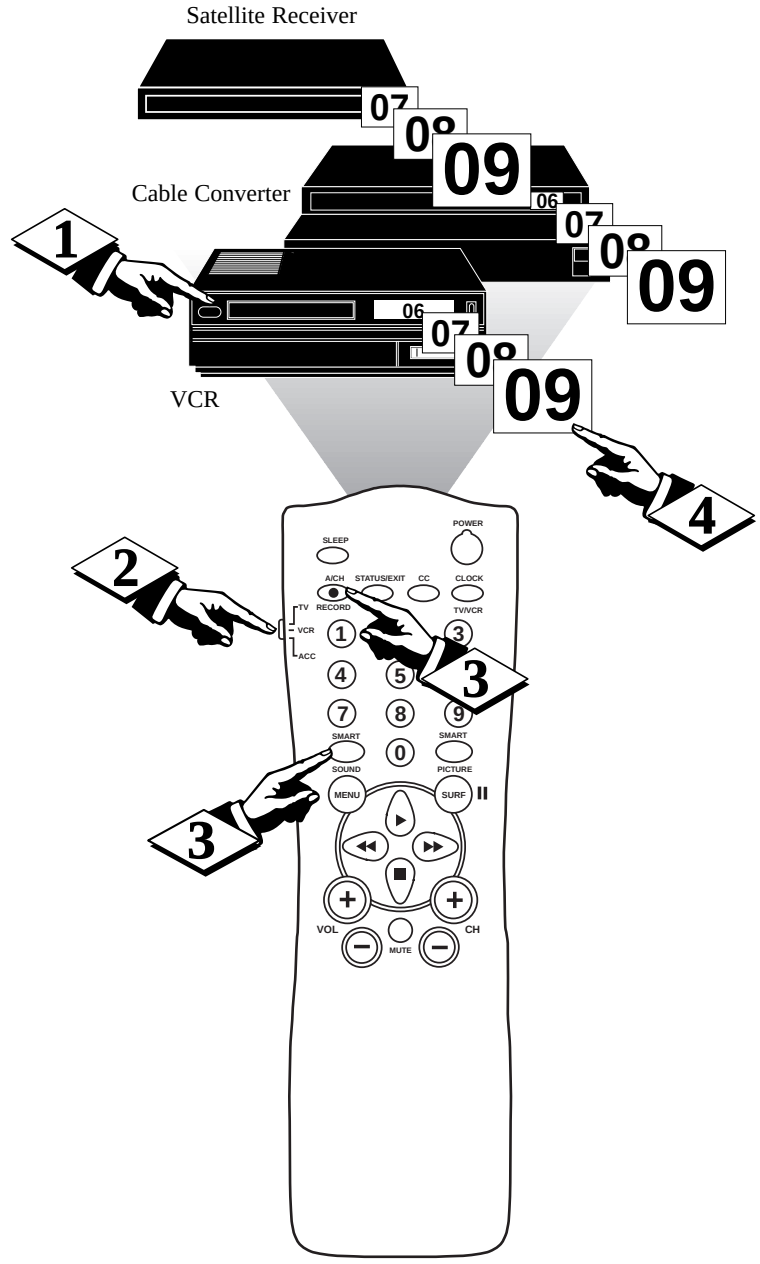
If the "Remote Code" number method shown on the previous pages did not set your remote to work your external device, then follow the easy steps listed below.

Please read steps 1-4 before beginning.

BEGIN

1. **Press the POWER button** on the device your are attempting to program to turn it ON.
2. **Place the TV/VCR/ACC Mode Switch** in the proper position.
3. **Press the (A/CH) • RECORD and the SMART SOUND buttons simultaneously** and hold them down.
4. **The device will begin to change channels** after the remote identifies the correct code. When the channels start to change release the A/CH RECORD and SMART SOUND buttons. The remote should be ready to operate the device.

STOP



SMART HELP

This method can take up to two minutes to complete.

Don't let the device scan up more than five channels. If you do the remote may pass up the right code, and another two minute search cycle will have to be repeated.

If no channel change happens within two minutes, repeat steps 1-4. Should a channel change still not occur, the remote will not work with the desired device.

REMOTE CONTROL DIRECT ENTRY CODES

VCR	REMOTE CODE NO.
Admiral	048
Advantz	358
Adventure	000
Aiko	278
Aiwa	000, 037, 307, 348, 352
Akai	041, 049, 053, 061, 106, 315
Alba	352
Amercian High	035
Amstrad	325, 332
Asha	240
Audiovox	037
Baird	107
Beaumark	240
Bell & Howell	104
Blaupunkt	003, 006, 154
Brandt	187, 320, 321
Broksonic	121, 184, 211, 295, 361
Bush	352
CCE	072, 278
Calix	037
Canon	035
Capehart	020
Carver	081, 146
Citizen	037, 278
Colt	072
Combitach	352
Craig	037, 047, 072, 240, 271
Curtis Mathes	035, 041, 060
Cybermax	051, 240
Daewoo	020, 045, 276
Daytron	020
Denon	042
Dynatech	000
Electrophonic	037
Emerex	032
Emerson	000, 002, 036, 037, 043, 061, 068, 088, 121, 164, 208, 209, 211, 212, 278, 295, 361, 479
Ferguson	107, 320, 321
Fisher	047, 054, 066, 104
Fuji	033, 035
Funai	000
GE	035, 060, 065, 202
Garrard	000
Go Video	232, 279, 432
Gold Star	037, 038
Gradiente	000, 406
Grundig	003, 007, 195, 347
HI-Q	047
Harley Davidson	000
Harman/Kardon	038, 075
Harwood	068, 072
Headquarter	046
Hinari	004, 352
Hitachi	000, 004, 041, 042, 065, 105, 168, 235
Ingersol	004
JVC	008, 041, 067, 208, 384, 486
Jensen	041
KEC	037, 278
KLH	072
Kenwood	038, 041, 067, 384
Kodak	035, 037
LXI	037
Lloyd's	000, 206
Loewe	004
Logik	004, 072
MEI	035
MGA	043, 061
MGN Technology	240
MTC	000, 240
Magnavox	000, 035, 081, 146, 181
Marta	037
Matsui	004, 348, 352
Matsushita	035, 162, 454
Memmorex	307
Memorex	000, 035, 037, 039, 046, 047, 048, 104, 240, 266, 307
Metz	003, 347
Minolta	042, 105
Mitsubishi	043, 061, 067, 075, 173, 443
Motorola	035, 048
Multitech	000, 072
NAD	058
NEC	036, 040, 041, 067, 104
Nikko	037
Nikon	034, 253
Noblex	240
Nordmende	297, 320, 321
Okano	346
Olympus	035, 226
Optimus	037, 048, 058, 104, 162, 432, 454
Optonica	062
Orion	004, 295, 348, 352, 479
Panasonic	035, 077, 162, 225, 226, 378, 454
Penney	035, 037, 038, 040, 042, 065, 105
Pentax	042, 065, 105
Philco	035
Philips	035, 062, 081, 110, 403
Pilot	037
Pioneer	058, 067
Portland	020
Profax	322
Profitronic	240
Protec	072
Pulsar	039, 051
Quarter	046
Quartz	046
Quasar	035, 077, 162, 454
RCA	042, 060, 065, 077, 105, 106, 149, 202
Radio Shack	000, 037
Radix	037
Randex	037
Realistic	000, 035, 037, 045, 047 048, 062, 066, 104
Ricoh	034, 253
Runco	039
SEG	322
SEI	004
STS	042
Saba	297, 320, 321
Saisho	004
Salora	075
Samsung	045, 051, 053, 240
Sanky	039, 048
Sansui	000, 041, 067, 271
Sanyo	046, 047, 104, 240, 268
Saville	352
Scott	043, 045, 121, 164, 211, 212
Sears	000, 035, 037, 042, 046, 047, 054, 066, 104, 105
Sharp	046, 062
Shintom	072
Shogun	051, 240
Shoral	004
Siemens	003
Singer	072
Sinudyne	004
Sony	000, 011, 022, 032, 033, 034, 035, 253, 275
Sunkel	348
Sunpak	253
Sylvania	000, 035, 043, 081, 103, 110
Symphonic	000
TMK	036, 208, 240
Tatung	041
Teac	000, 041
Technics	035, 162
Teknika	000, 035, 037
Telefunken	187, 320, 321
Tansal	322
Thomas	000
Thomson	320
Toshiba	043, 045, 066, 212, 366
Totavision	037, 240
Towada	322
Unitech	240
Universum	325
Vactor	045
Vactor Research	038, 040
Video Concepts	040, 045, 061
Videosonic	240
Wards	000, 035, 042, 047, 048, 060, 062, 072, 081, 149, 161, 212, 240
XR-1000	000, 035, 072
Yamaha	038
Zenith	000, 033, 034, 039

CABLE CONVERTOR	REMOTE CODE NO.
ABC	001, 003, 007, 008, 011, 013, 014, 017
Aliegio	153
Andover	544
Antronix	022
Archer	022, 153
Balcor	056
British Telecom	105
Cable Star	056
Cablatenna	022
Cabletime	161, 271, 377, 448
Cableview	022
Century	153
Citizen	153
Clyde	086
Colour Voice	025, 031
Comtec	274
Comtronics	040
Contec	019
Cryptovision	600
Deceat	423

REMOTE CONTROL DIRECT ENTRY CODES

CABLE CONVERTOR	REMOTE CODE NO.
Eastern	.002, 274
Everquest	.015, 040
Filmnet	.443
Focus	.400
France Telecom	.451
GC Electronics	.056
GEC	.086
Ganard	.153
Gemini	.015, 070, 242
General Instrument	.011, 276, 476
Gold Star	.040
Grundig	.529
Hamlin	.009, 020, 034, 259
Hitachi	.011
Hytex	.007
Jasco	.153
Jerrold	.003, 011, 012, 014, .015, 024, 276, 476
M.N.E. T.	.443
MNet	.443
Macon	.033
Magnavox	.027, 032, 334
Memorex	.000
Movie Time	.063
NSC	.063, 070
Oak	.007, 019
Optimus	.021
Panasonic	.000, 021, 107
Paragon	.000
Philips	.025, 027, 031, 153, 242, 290, 334
Pioneer	.533, 753
Popular Mechanics	.400
Pulsar	.000
RCA	.021
Radio Shack	.015
Recoton	.400
Regal	.020, 259
Regency	.002
Rembrandt	.011, 070
Runco	.000
SL Marx	.040
Salora	.382
Samsung	.040
Satbox	.375
Scientific Atlanta	.008, 017, 477
Signal	.015, 040
Signature	.011
Sprucer	.021
Star Sight	.542
Starcom	.003, 015
Stargate	.015, 040
Starquest	.015
Sylvania	.001
TV85	.063
Tandy	.258
Tele+1	.443
Teleservice	.281
Teleview	.040
Texscan	.001
Timeless	.274
Tocom	.012, 013, 059
Toshiba	.000
Tudl	.286
Tusa	.015
Unike	.022, 153

CABLE CONVERTOR	REMOTE CODE NO.
United Artists	.007
United Cable	.003
Universal	.022, 056, 153, 191
Videoway	.250
Viewstar	.027, 063, 258
Visi Cable+	.461
Westminster	.105
Wolsey Gaine	.544
Zenith	.000, 054, 525
Zentek	.400

DBS	REMOTE CODE NO.
Alpha Star	.772
Echostar	.775
HTS	.775
Hitachi	.819
Hughes Network System	.749
Jerrold	.627
Magnavox	.722, 724
Memorex	.724
Panasonic	.701
Philips	.722, 724
Primestar	.627
RCA	.566
Sony	.639
Toshiba	.790
Uniden	.724

Satellite	REMOTE CODE NO.
AST	.351
Akai	.515
Alba	.352, 515, 613
Aldea	.288
Amstrad	.080, 252, 345, 461, 509, 689
Ankaro	.220, 288, 369
Anitron	.183
Armstrong	.243
Astra	.108
Avalon	.396
Axis	.369
BT	.515, 668
Beko	.189
Best	.369
Boca	.243, 513
Bush	.067
Cambridge	.344, 515
Channel Master	.362
Commlink	.288
Connexions	.396
Conrad	.607
Crown	.243
DDC	.362
DNT	.396
Echostar	.396
Farguson	.067, 183, 189, 336
Fidelity	.252
Finiux	.108, 397
Fuba	.369, 396
G-Bat	.183
Galaxis	.286
Gooding	.571
Grundig	.173, 189, 571, 750
Hinari	.183

Satellite	REMOTE CODE NO.
Hirschmann	.397, 573
Houston	.668
Huth	.220, 243, 268
ITT	.108
Intervision	.592
JVC	.515, 571
Kathrein	.092, 504, 622, 658
La Sat	.513, 607
Lennox	.592
Lupus	.369
Luxor	.108, 573
Manhatten	.592
Maspro	.092, 336, 750
Matsui	.571
Mediamarkt	.248
Minerva	.571
Mintec	.576
Morgan's	.243, 513
Newhaus	.220
Nikko	.360, 713
Nokia	.108, 397, 573
Nordmende	.362
Orbitech	.501
Pace	.067, 183, 336, 455, 791
Paliadium	.571
Palsat	.501
Philips	.200, 292, 571, 750
Phonotrend	.288, 592
Plasmatic	.442
Proset	.288
Quadral	.362, 628
RFT	.220, 288
Radix	.396
SAT	.351, 461
SEG	.369
Saba	.336
Salora	.108
Satec	.183
Schwaiger	.183, 504
Seemann	.396, 578, 626
Skymaster	.288, 626
Sony	.704
Star Trak	.421
Strong	.421
Sunstar	.513
Tantec	.336
Techni Sat	.262, 501
Teleka	.243, 613
Tonna	.668
Triad	.351
Universum	.571
Vtech	.351
Wisi	.351, 396

DVD	REMOTE CODE NO.
Kenwood	.534
Mitsubishi	.521
Panasonic	.490
Philips	.539
Pioneer	.550
RCA	.522
Sony	.552
Toshiba	.503

USING THE REMOTE'S VCR BUTTONS

When using the TV remote with a VCR, first make certain it is set to control your VCR (by the REMOTE CODE or SEARCH method).

BEGIN

1. **Set the TV/VCR/ACC mode switch to VCR** on the remote.
2. **Point the top of the remote** toward the front of the VCR (remote sensor window) when pressing the buttons.

STOP

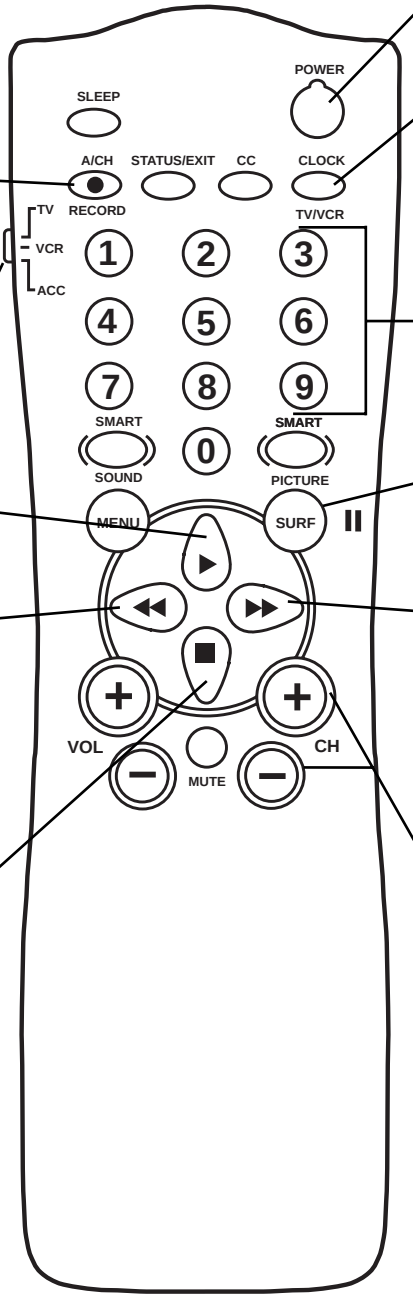
RECORD BUTTON ●
Hold the (A/CH) • RECORD button down to begin a VCR recording.

VCR SYSTEM SWITCH
Set in the VCR position to send remote commands to the VCR.

PLAY BUTTON ▶
Press to begin playback of a video tape.

REWIND BUTTON ◀◀
Press to rewind tapes. For some VCR's the STOP button may have to be pressed first, then REWIND. In playback mode hold down the button to view picture moving rapidly in reverse.

STOP BUTTON ■
Press to stop the motion of a tape in playback, rewind, fast forward, etc.



POWER BUTTON
Press to turn the VCR ON and OFF.

TV/VCR BUTTON
Press while in the VCR mode (VCR indicator on the front of the unit will light) to view the playback of a tape. Press again to place in the TV position (VCR indicator light will go off) to view one program while recording another program.

NUMBER BUTTON
Press buttons for direct VCR channel selections.

PAUSE BUTTON II
Press to temporarily stop the tape during a playback or recording. Press again to release Pause.

FAST FORWARD BUTTON ▶▶
Press to rapidly advance the tape. For some VCR's you may need to press the STOP button first, then the FAST FORWARD button. In playback mode hold the button down to view the picture moving rapidly in the forward direction.

CHANNEL +/– BUTTONS
Press to scan up or down through the VCR channel numbers.

SMART HELP

Remember, the VCR buttons on the remote will not operate your VCR if those features are not found on your VCR remote control.

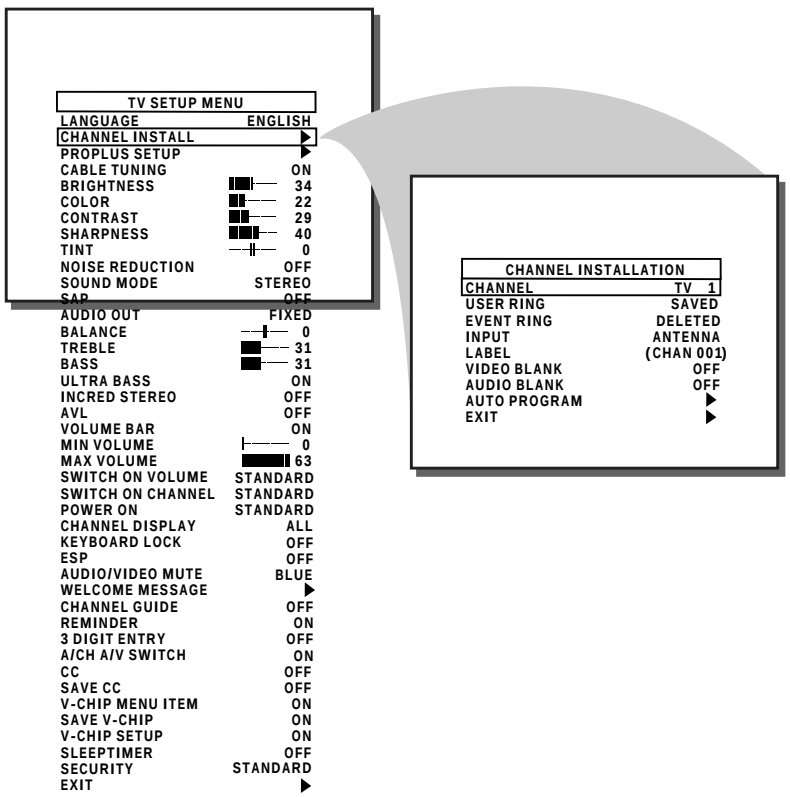
Note: All VCR functions (particularly Search, Rewind, Fast Forward, etc.) will operate the same as with the original VCR remote control provided with the VCR.

DESCRIPTION OF ON-SCREEN CONTROLS (COMMERCIAL MODE)

Depending on the model and its features, some or all of the display functions and features described here will be valid. ***Note: Certain features which are found in both the Commercial and Consumer modes may be selected and adjusted in the same manner (for example: Language, Cable Tuning, Brightness etc.). Many of these shared onscreen Menu features are already described and explained in detail in the preceding Consumer mode sections.***

To perform setup operations for the TV Setup Commercial modes, a T374AH remote with its TV Setup, Guest, and Data Communication Mode capabilities can be used. To set the TV to Commercial or Consumer mode, select a mode in the ACCESS LEVEL option of the PROPLUS SETUP MENU. Note: For some select Institutional Television models the buttons on the front of the TV can also be used to select Commercial mode settings. Other Commercial setup and verification procedures may also be performed from the T374AH remote. (See T374AH Remote Control Instructions, part # IB7166E002, for details.)

COMMERCIAL SETUP MENU



CHANNEL INSTALLATION SUB-MENU

CHANNEL - When highlighted, enter the desired channel number using the Number buttons you wish to edit. The following control items, contained within the Channel Installation menu, will effect the chosen channel.

USER RING - When highlighted, press the Cursor Right (▶) or Left (◀) buttons on the remote to choose SAVED (or DELETED). When SAVED is selected, the channel will remain or be added to the TV's program memory. When DELETED is selected, the channel will be dropped from the TV's program memory and will not appear when the TV channels are scanned (using the Channel +,- buttons).

EVENT RING - When highlighted, press the Cursor Right (▶) or Left (◀) buttons on the remote to choose SAVED (or DELETED). When SAVED is selected, the channel will remain or be added to the channels that can be selected during an event.

INPUT - When highlighted, press the Cursor Right (▶) or Left (◀) buttons on the remote to select ANTENNA, FRONT, AUX, or S-VIDEO input signal options. The Input control directs the TV to select the specific indicated input whenever this channel is tuned.

LABEL - When highlighted, press the Cursor Right (▶) button on the remote to select the first character space area. Then press the Cursor Up (▲) and Down (▼) buttons to scroll through the list of available letter characters/numbers/& symbols provided for your labeling use. Press the Cursor Right (▶) button to highlight the next character space and continue to repeat the process until the complete label or channel title has been entered. The Channel Label will appear in the corner of the TV screen beside the selected channel number.

VIDEO BLANK - When highlighted, press the Cursor Right (▶) or Left (◀) buttons to turn the VIDEO BLANK control ON (or OFF). When ON, no video will be shown when this specific channel is tuned. When OFF, normal viewing of video for this specific channel will take place.

AUDIO BLANK - When highlighted, press the Cursor Right (▶) or Left (◀) buttons to turn the AUDIO BLANK control ON (or OFF). When ON, no sound will be heard through the TV speakers when the channel is tuned. When OFF, normal sound playback will be heard for the selected channel.

AUTO PROGRAM - When highlighted, press the Cursor Right (▶) or Left (◀) buttons to begin an automatic channel search for all available received signal programs. Any channels found will be SAVED i n the TV's program memory. These channels can then be selected for viewing by pressing the Channel (+,-) buttons.

LANGUAGE - See page 23 on the use of the English/Francais/or Espanol Menu language option control. Note: This control is intended for onscreen Menu items. The language of Labels, Closed Captioning, and other Channel Guide information will not change.

CHANNEL INSTALL - See previous page for details on Sub-Menu containing Program Channel, Input, Label, A/V Blank, and Auto Program controls.

PROPLUS SETUP - See page 2 and 33 for detail use of the Sub-Menu containing Access Level (Consumer, Commercial, Locked, Unlocked) and Event programming controls.

CABLE TUNING - See page 10 on the use of the Cable TV channel selection mode control.

COLOR ADJUST CONTROLS - See page 14 for adjustments of Brightness, Contrast, Noise Reduction, etc. picture controls.

AUDIO ADJUST CONTROLS - See page 14 for sound control adjustments (Bass, Balance, etc.). Page 15 for Incredible Stereo. Page 16 for Automatic Volume Limiter and Volume Bar.

MIN VOLUME (Minimum Volume) - Highlight MIN VOLUME, then press the Cursor Right (▶) or Left (◀) buttons to set the minimum allowable volume level for TV sound.

MAX VOLUME (Maximum Volume) - Highlight MAX VOLUME, then press the Cursor Right (▶) or Left (◀) buttons to set the maximum allowable volume for TV sound.

SWITCH ON VOLUME - Highlight SWITCH ON VOLUME, then press the Cursor Right (▶) button to select a desired volume level. The volume will be at the preset level every time you turn on the TV. If STANDARD is selected, the last volume level will be used.

SWITCH ON CHANNEL - Use this feature to have the TV tune to the same channel (or signal source) every time you turn ON the TV. Highlight SWITCH ON CHANNEL, then press the Cursor Right (▶) or Left (◀) buttons to select FRONT, AUX, S-VIDEO, STANDARD, or any channel 1 - 125. (You can also use the Number buttons to select a channel.) If STANDARD is selected, the last viewed channel will be used.

POWER ON - Highlight POWER ON, then press the Cursor Right (▶) or Left (◀) buttons to select FORCED. This disables the POWER button on the front of the TV. The TV is now activated when the AC power cord is plugged into an outlet. With a consumer remote, the TV will not turn ON or OFF. In the STANDARD mode, The TV will return to normal operation.

CHANNEL DISPLAY - Highlight CHANNEL DISPLAY, then press the Cursor Right (▶) or Left (◀) buttons to select ALL, NONE, NUMBER, or LABEL. “NONE” disables any on-screen displays, except SLEEP TIMER and MUTE. NONE also disables the consumer remote’s Number or Channel +,- buttons for channel selection. “ALL” allows the Channel Number, Channel Label, or Channel Guide to appear. “NUMBER” allows only the Channel Number to be displayed onscreen. “LABEL” allows the onscreen Label to appear as set under the Channel Installation Menu control.

KEYBOARD LOCK - Highlight KEYBOARD, then press the Cursor Right (▶) or Left (◀) buttons to select ON (or OFF). “OFF” disables all the buttons on the front panel of the TV from manual operation. “ON” enables all buttons on the front of the TV to operate.

ESP - Energy Saving Programmability (ESP) allows you to select an amount of time (in hours) before the TV will automatically turn OFF. The TV must remain on continuously during the amount of time you select. If the power is switched off, the ESP timer will be reinitialized. Highlight ESP, then press the Cursor Right (▶) or Left (◀) buttons to select the number of hours (1 - 99) before the TV turns OFF. (You may also use the Number buttons to enter the number of hours).

AUDIO/VIDEO MUTE - See page 17 for details on how the TV screen color can be set for blanked out channels.

WELCOME MESSAGE - Highlight WELCOME MESSAGE, then press the Cursor Right (▶) or Left (◀) buttons to display the Welcome Message sub-menu. Within this Menu the Message can be turned ON or OFF. Two lines of information (LINE 1, LINE 2) can be displayed onscreen when the TV is powered ON. Use the Cursor Up (▲) and Down (▼) buttons to scroll the characters, symbols, and numbers available for the message. “CLEAR” will cancel any message written.

CHANNEL GUIDE - Highlight CHANNEL GUIDE, then press the Cursor Right (▶) or Left (◀) buttons to select OFF, ON, or POWER ON. If you select POWER ON, the Channel Guide (a list of channels that are labeled) will appear when you turn the TV ON. The Channel Guide will appear also when you press the CH GDE button on the remote. If you select ON, the Channel Guide will appear only when you press CH GDE. (Also, if you select POWER ON or ON, make sure DISPLAYS is set to ALL.) If you select OFF, the Channel Guide will not appear when you press CH GDE. Remember, only the programmed channels that are Labeled (within the Channel Installation Menu) will appear in the Channel Guide.

REMINDER - Highlight REMINDER, then press the Cursor Right (▶) or Left (◀) buttons to select ON. The current channel number, and Label (if assigned), will appear onscreen at all times. (Make sure CHANNEL DISPLAY control is set to ALL and Closed Captioning is set to OFF. The “OFF” position allows the channel number to appear briefly when the channel is selected, then it will disappear.

3 DIGIT ENTRY - Highlight 3 DIGIT ENTRY, then press the Cursor Right (▶) or Left (◀) buttons to select ON (or OFF). “ON” allows three digit channel number entries in order to select channels above 99.

A/CH A/V SWITCH - Highlight A/CH A/V SWITCH, then press the Cursor Right (▶) or Left (◀) buttons to select ON (or OFF). “ON” allows the A/CH button on the remote to also select signal input sources (ANTENNA, FRONT, AUX, S-VIDEO). “OFF” sets A/CH to switch only between the last viewed and current channel selections.

CC (Closed Captioning) - See page 18 for setup and use of Closed Caption mode viewing. Note: CC1 is the captioned mode used most often by broadcasters. CC ON MUTE will automatically display the Closed Caption mode when the remote’s MUTE button is pressed.

SAVE CC - Highlight SAVE CC, then press the Cursor Right (▶) or Left (◀) buttons to select ON (or OFF). “ON” will save the CC mode you have selected, even if the TV Power is turned OFF. “OFF” will turn off the selected CC mode when the TV is turned OFF.

V-CHIP MENU ITEM - Highlight V-CHIP MENU ITEM, then press the Cursor Right (▶) or Left (◀) buttons to select ON (or OFF). “ON” allows for V-CHIP control items to be shown in the Features Menu. “OFF” will not display the V-CHIP control options.

DESCRIPTION OF ON-SCREEN CONTROLS (COMMERCIAL) CONTINUED

SAVE V-CHIP - Highlight SAVE V-CHIP, then press the Cursor Right (▶) or Left (◀) buttons to select ON (or OFF). "ON"will save the current V-CHIP control settings within the TV's memory.

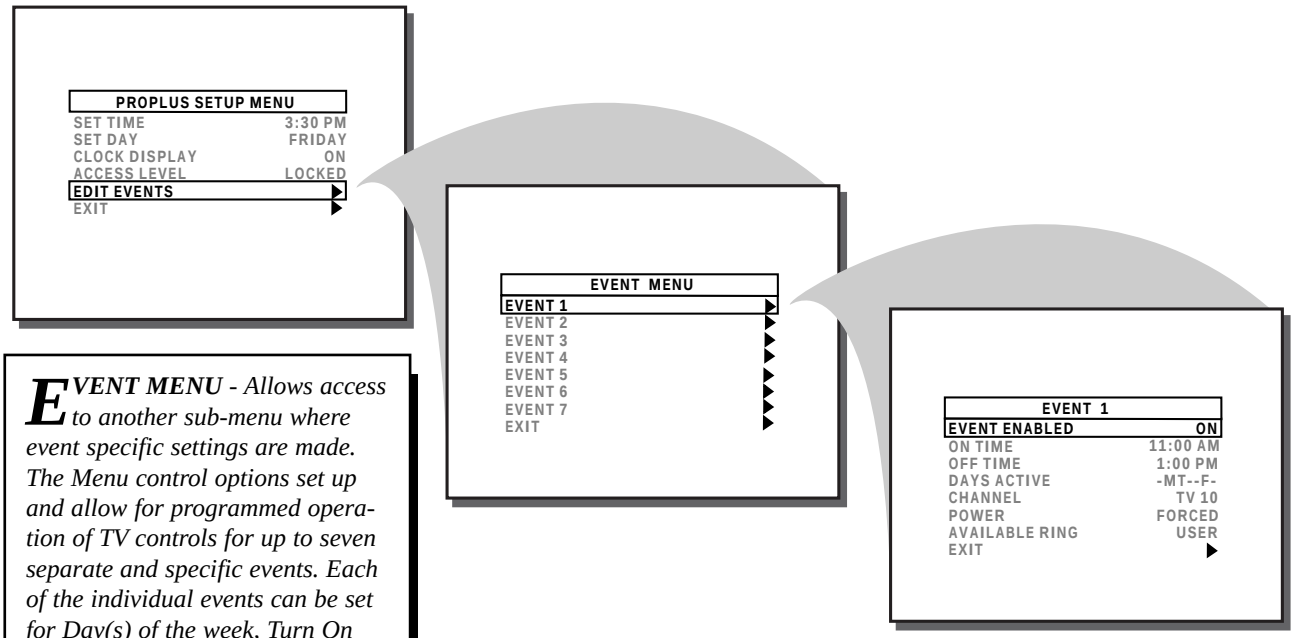
V-CHIP SETUP - Highlight V-CHIP SETUP, then press the Cursor Right (▶) or Left (◀) buttons to select the V-CHIP sub-menu. Use the various TV and Movie Ratings system settings to block or censor the viewing of TV programming. See pages 19-21 for further details on the Ratings settings and their use.

SLEEPTIMER - See page 22 for details on setting the TV to automatically shut itself OFF (according to preset time intervals of 15-240 minutes).

SECURITY - Highlight SECURITY, then press the Cursor Right (▶) or Left (◀) buttons to select STANDARD (or HIGH). Note: The Security control item will not be in the Menu when using the Consumer remote, but (when "STANDARD" security level has been selected) a consumer remote button sequence (31, 97, 53, MUTE) can be used to access to the SETUP MENU. With "HIGH" security level selected, access to the SETUP MENU is only allowed with a commercial Setup Remote.

EXIT - Highlight EXIT, then press the Cursor Right (▶) or Left (◀) buttons to select YES. The onscreen menu will disappear. The onscreen menu also disappears after 60 seconds if there has been no use of the displays.

PROPLUS SETUP EDIT EVENTS SUB-MENU



EVENT MENU *- Allows access to another sub-menu where event specific settings are made. The Menu control options set up and allow for programmed operation of TV controls for up to seven separate and specific events. Each of the individual events can be set for Day(s) of the week, Turn On time, Turn Off time and preset channel selection.*

EVENT 1-7 - Highlight an Event, for example, EVENT 1. Then, press the Cursor Right (▶) or Left (◀) buttons. You may now set the **ON TIME**, **OFF TIME**, **CHANNEL**, and **DAYS ACTIVE** for the specific Event 1. To adjust the ON/OFF TIME items, use the Cursor Right (▶) or Left (◀) buttons to highlight the desired hour and minute number space, then use the Cursor ▲ / ▼ buttons to set each item. (Note: The Channel Number buttons on the remote can also be used to set the time. Press 1 for AM setting, press 0 for PM setting.) Repeat this procedure to set the ON/OFF TIME, CHANNEL, and select DAYS for each desired Event.

EVENT ENABLED - Highlight EVENT ENABLED, then press the Cursor Right (▶) or Left (◀) buttons to place the specific Event program settings into the TV's memory (ON). "OFF" will not allow the Event settings to take place.

CHANNEL - This feature allows you to choose the channel to which the TV will tune for the Event. Highlight CHANNEL, then press the Cursor Right (▶) or Left (◀) buttons to select FRONT, AUX, S-VIDEO, or a channel between 1-125. (You may also use the Number buttons to select a channel.)

POWER - Highlight POWER, then press the Cursor Right (▶) or Left (◀) buttons to select FORCED or STANDARD. This feature is similar to the POWER ON feature in the TV Setup menu, but this feature only operates during an Event. When FORCED is selected, the TV will ignore any commands during an Event. (POWER ON in the Setup menu must be set to STANDARD.) When STANDARD is selected, the TV will operate normally.

AVAILABLE RING - Highlight AVAILABLE RING, then press the Cursor Right (▶) or Left (◀) buttons to select EVENT, NONE, or USER. This either saves the selected channel number into either one of the existing CHANNEL INSTALLATION "EVENT" or "USER" program memory rings (see page 31), or places the channel as a nonselectable "NONE" category.

EXIT - To return to previous ProPlus Menu Setup screens, highlight EXIT, then press the Cursor Right (▶) or Left (◀) buttons to move back one Menu screen at a time.

TIPS IF SOMETHING ISN'T WORKING

Please make these simple checks before calling for service. Theses tips can save you time and money since charges for TV installation and adjustment of customer controls are not covered under your warranty.

CAUTION: A video source (such as a video game, Compact Disc Interactive - CDI, or TV information channel) which shows a constant non-moving pattern on the TV screen can cause picture tube damage. When your TV is continuously used with such a source, the pattern of the non-moving portion of the game (CDI, etc.) could leave an image permanently on the picture tube. When not in use, turn the video source OFF. Regularly alternate the use of such video sources with normal TV viewing.

No Power

- Check the TV power cord. Unplug the TV, wait 10 seconds, then reinsert plug into outlet and push POWER button again.
- Check to be sure outlet is not on a wall switch.
- Check MODE access in Setup Menu (see page 2) for correct operation mode. Also check POWER ON and KEYBOARD controls for commercial users.

No Picture

- Check antenna connections on the rear of the TV. Are they properly secured to the antenna plug on the TV?
- Check the CABLE TUNING control for correct position. Check A/V MUTE, ACCESS LEVEL, VIDEO BLANK, and EVENT MENU controls for correct setting in Setup Menu for commercial users.
- Check INPUT (under CHANNEL INSTALLATION in CONSUMER mode) for correct position. FRONT, AUX, or S-VIDEO positions without a supplied video signal source will result in a blank screen.

No Sound

- Check the VOLUME buttons. Check AUDIO BLANK and MAX VOL in Setup Menu for commercial users.
- Check the MUTE button on the remote control.
- Check the SPEAKER on-screen Menu control and EXTERNAL SPEAKER switch on rear of TV. OFF position will eliminate sound at the set.
- If attempting auxiliary equipment hook-ups, check audio jack connections.

Remote Does Not Work

- Check batteries. Replace with AA Heavy Duty (Zinc Chloride) or Alkaline batteries if necessary.
- Clean the remote and the remote sensor window on the TV.
- Check the TV power cord. Unplug the TV, wait 10 seconds, then reinsert plug into outlet and push POWER button again.
- Check to be sure TV outlet is not on a wall switch.

TV Displays Wrong Channel or No Channels Above 13

- Repeat channel selection.
- Add desired channel numbers (CHANNEL RING control) into TV memory.
- Check CABLE TUNING ON/OFF control for correct position.

This TV is equipped with protective circuitry that shuts the TV off in case of moderate power surges. Should this occur turn the TV back on by pressing the POWER button once or twice, or unplug (wait 10 seconds) and then replug the power cord at the AC outlet. This feature is NOT designed to prevent damage due to high power surges such as those caused by lightning, which is not covered by your warranty.

Cleaning and Care

- To avoid possible shock hazard be sure the TV is unplugged from the electrical outlet before cleaning.
- When cleaning the TV screen, take care not to scratch or damage the screen surface (avoid wearing jewelry or using anything abrasive). Wipe the front screen with a clean cloth dampened with water. Use even, easy, vertical strokes when cleaning.
- Gently wipe the cabinet surfaces with a clean cloth or sponge dampened in a solution of cool clear water. Use a clean dry cloth to dry the wiped surfaces.
- Occasionally vacuum the ventilation holes or slots in the cabinet back.
- Never use thinners, insecticide sprays, or other chemicals on or near the cabinet, as they might cause permanent marring of the cabinet finish.

GLOSSARY OF TELEVISION TERMS

Coaxial Cable - A single solid antenna wire normally matched with a metal plug (F-type) end connector that screws (or pushes) directly onto a 75 Ohm input found on the Television or VCR.

Closed Caption - Broadcast standard which allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired this feature uses on-screen "text boxes" to show dialogue and conversations while the TV program is in progress.

BNC Connector - A twist-lock connector for various types of RG-type coaxial cables. Also referred to as Bayonet Nut Coupler.

Display - An on screen message or graphics that helps the user operate and adjust his Television feature controls. See On Screen Displays (OSD).

Direct Audio/Video Inputs - Located on the rear of the TV, these connectors (RCA phono type plug) are used for the input of audio and video signals. Designed for use with VCRs (or other accessories) in order to receive higher picture resolution and offer sound connection options.

Event - Defines operation of the TV control system. Each event can be programmed for the day(s) of the week; turn ON time; turn OFF time; and channel.

Multichannel Television Sound (MTS) - The broadcast standard that allows for stereo sound to be transmitted with the TV picture.

On Screen Displays (OSD) - Refers to the wording or messages generated by the television (or VCR) to help the user with specific feature controls (color adjustment, programming, etc.).

Menu - An onscreen listing of feature controls shown on the Television screen that are made available for user adjustments.

Programming - The procedure of adding or deleting channel numbers into the Television's memory circuits. In this way the Television "remembers'' only the locally available or desired channel numbers and skips over any unwanted channel numbers.

Remote Sensor Window - A window or opening found on the Television control panel through which infrared remote control command signals are received.

Second Audio Program (SAP) - Another or additional audio channel provided for in the Multichannel Television Sound (MTS) broadcast standard. The most frequently proposed use for SAP is the simultaneous bilingual broadcast of TV program material.

Setup Code - Special sequence of button presses used to access the Setup Menu when the Setup Remote is not available.

Setup Remote - Remote control transmitter used by installer to set up commercial functions and modes of operation.

Status - Allows the user to quickly confirm what channel number is currently being viewed. Status can also be used to clear the Television of on screen displays or information (rather than waiting for the displays to "time out" or automatically disappear from the screen).

Twin Lead Wire - The more commonly used name for the two strand 300 Ohm antenna wire used with many indoor and outdoor antenna systems. In many cases this type of antenna wire requires an additional adapter (or balun) in order to connect to the 75 Ohm Input terminals of more recent Televisions and VCRs.

INDEX

Accessories/Optional 2, 5, 6
Adapter Connector.....6, 23, 24
Add/Delete Channels.....11-12, 31
Alternate Channel (A/CH).....8
Audio/Video Input Jacks 2, 5, 6, 24
Battery Installation.....8
Cable TV Connections/Settings.....6, 10
Channel Display 7, 13, 17
Channel Program Memory 2, 11-12, 31
Channel Reminder 17
Closed Captioning.....18
Clock Set and Display 22
Controls/TV 7
Controls/Remote 7, 8
Features 5
First Time Use 7, 8
Glossary TV Terms 35
Input Control.....13, 24
Inputs/Audio and Video.....2, 5, 6, 24
Language Option.....23
Memory/Program Channels 2, 11-12, 31
Menu Button 8, 9
Minus(-)/Plus (+) Buttons.....7, 8
Output (Audio) Jacks.....24
Precautions/Safety 3, 34
Programming Channels 2, 11-12, 31
ProPlus Setup.....2, 31
Remote Control 7-8, 25-30
Requesting Service 34, 36
RF Coaxial Cable..... 6
Safety/Precautions 3, 34
Sensor (Remote) 7
Setup Modes 2, 31
Sleep Timer 22
Speaker Terminal Connections 23
Status Button.....8, 9
Stereo 14
Tips for Service.....34
V-Chip Content Advisory 19-21
VCR/TV Connections.....6
Volume Bar Control 16
Warranty.....36

LIMITED WARRANTY

COLOR TELEVISION

One Year Free Labor
One Year Free Service on Parts (Two Years Free Service on Color Picture Tube)
This product can be repaired in-home.

WHO IS COVERED?

You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase.

WHAT IS COVERED?

Warranty coverage begins the day you buy your product. For one year thereafter, all parts will be repaired or replaced, and labor is free. From one to two years from the day of purchase, you pay for the replacement or repair of all parts except the picture tube, and for all labor charges. After two years from the day of purchase, you pay for the replacement or repair of all parts, and for all labor charges. All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the product expires, the warranty on all replaced and repaired parts also expires.

WHAT IS EXCLUDED?

Your warranty does not cover:

- ¥ labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- ¥ product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics Company.
- ¥ reception problems caused by signal conditions or cable or antenna systems outside the unit.
- ¥ a product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- ¥ incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)

WHERE IS SERVICE AVAILABLE?

Warranty service is available in all countries where the product is officially distributed by Philips Consumer Electronics Company. In countries where Philips Consumer Electronics Company does not distribute the product, the local Philips service organization will attempt to provide service (although there may be a delay if the appropriate spare parts and technical manual(s) are not readily available).

MAKE SURE YOU KEEP...

Please keep your sales receipt or other document showing proof of purchase. Attach it to this owner's manual and keep both nearby. Also keep the original box and packing material in case you need to return your product.

BEFORE REQUESTING SERVICE...

Please check your owner's manual before requesting service. Adjustments of the controls discussed there may save you a service call.

TO GET WARRANTY SERVICE IN U.S.A., PUERTO RICO OR U.S. VIRGIN ISLANDS...

Contact a Philips factory service center (see enclosed list) or authorized service center to arrange repair.

(In U.S.A., Puerto Rico and U.S. Virgin Islands, all implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the duration of this express warranty. But, because some states do not allow limitations on how long an implied warranty may last, this limitation may not apply to you.)

TO GET WARRANTY SERVICE IN CANADA...

Please contact Philips at:

1-800-661-6162 (French Speaking)
1-800-363-7278 (English Speaking)

(In Canada, this warranty is given in lieu of all other warranties. No other warranties are expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose. Philips is not liable under any circumstances for any direct, indirect, special, incidental or consequential damages, howsoever incurred, even if notified of the possibility of such damages.)

REMEMBER...

Please record the model and serial numbers found on the product below. Also, please fill out and mail your warranty registration card promptly. It will be easier for us to notify you if necessary.

MODEL # _____

SERIAL # _____

This warranty gives you specific legal rights. You may have other rights which vary from state/province to state/province.

Philips Service Company, P.O. Box 2976, Longview, TX 75606, (903) 242-4800